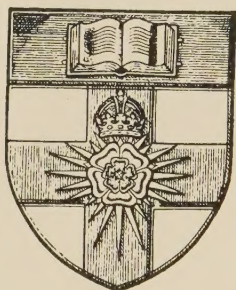


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THE
SURVEYORS' INSTITUTION

(Incorporated by Royal Charter),

12, GREAT GEORGE STREET, WESTMINSTER, S.W.

TRANSACTIONS.

VOL. XLIX.

SESSION 1916-1917.



LONDON:

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12, GREAT GEORGE STREET, WESTMINSTER, S.W. 1.

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The Surveyors' Institution

(INCORPORATED BY ROYAL CHARTER),

12, GREAT GEORGE STREET,

WESTMINSTER, S.W.

OFFICERS, 1916-1917.

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PERCIVALL CURREY.

Secretary.

ALEXANDER GODDARD.

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Composed of Members of Council and Provincial Chairmen.

BUILDING.
COUNCIL SELECTION.
COUNTY DISTRICTS AND COUNTRY
MEETINGS.
DINNER.
EDUCATION.
ELECTIONS.

FINANCE.
FORESTRY.
LIBRARY AND SESSIONAL PAPERS.
PARLIAMENTARY BILLS AND
GENERAL PURPOSES.
PROFESSIONAL PRACTICE.
QUANTITY SURVEYORS.

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1868 *John Clutton*
1870 *Richard Hall*
1872 *Edward Norton Clifton*
1874 *Thomas Huskinson*
1876 *Edmund James Smith*
1878 *William Sturge*
1880 *Edward Ryde*
1883 *Thomas Smith-Woolley*
1885 *Edward T Anson*
1886 *William James Beadel, M.P.*
1888 *Elias Pitts Squarey*
1890 *Robert Collier Driver*
1892 *Charles John Shoppee*
1894 *Thomas Chatfeild Clarke*
1895 DANIEL WATNEY
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1898 *Robert Vigers*
1899 *Thomas Miller Rickman*

1900 *John Shaw*
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1909 SIR ALEXANDER ROSE
STENNING
1910 LESLIE ROBERT VIGERS
1911 W. EDGAR HORNE, M.P.
1912 HON. EDWARD GERALD STRUTT
1913 *W. Edward Woolley*
1914 HOWARD CHATFEILD CLARKE
1915 JOHN HENRY HANSON

(The names of those deceased are printed in italics.)

The Surveyors' Institution

(INCORPORATED BY ROYAL CHARTER)

Is established—

- (1) To secure the advancement and facilitate the acquisition of that knowledge which constitutes the profession of a Surveyor; viz.—the art of determining the value of all descriptions of landed and house property, and of the various interests therein; the practice of managing and developing estates; and the science of ad-measuring and delineating the physical features of the earth, and of measuring and estimating artificers' work.
- (2) To promote the general interests of the profession, and to maintain and extend its usefulness for the public advantage.

THE INSTITUTION was established in 1868, was incorporated by Royal Charter in 1881, and has a total membership of over 5,000.

THE INSTITUTION consists of four classes, viz.: FELLOWS, PROFESSIONAL ASSOCIATES, ASSOCIATES, and HONORARY MEMBERS, with a class of STUDENTS attached.*

A FELLOW must have qualified for that position by having acquired a practical knowledge of surveying in one or other of its branches as above defined, and have held for at least five years a responsible position in the profession; and must have passed the Examinations called for by the Rules of Examination, or some other Examination in the United Kingdom or the Colonies which the Council may declare to be equivalent thereto. § A Fellow has the right, conferred by the Charter, to use the letters F.S.I. after his name. A Fellow has also the right, under By-Laws allowed by H.M. Privy Council, to describe himself as "Chartered Surveyor."

* A class of Probationers was established in 1914. For particulars see last paragraph on page viii.

§ The Council possess only a very limited dispensing power as regards the Examinations.

A PROFESSIONAL ASSOCIATE must be more than twenty-one years of age, a Surveyor by profession, in practice on his own account or employed as an Assistant in a Surveyor's Office, and qualified for the class by having passed the Examinations. A Professional Associate has the right, conferred by the Charter, to use the letters P.A.S.I. after his name. A Professional Associate has also the right, under By-Laws allowed by H.M. Privy Council, to describe himself as "Professional Associate Chartered Surveyor."

AN ASSOCIATE must be more than twenty-one years of age, not a Surveyor by profession, but his pursuits must be such as to qualify him to unite with Surveyors in the advancement of professional knowledge.

AN HONORARY MEMBER must be a person who, either by reason of his position or experience, or his eminence in science, may be enabled to render assistance in promoting the objects of The Institution, but who is not engaged in practice as a Surveyor in Great Britain or Ireland. He has the privilege of being present and taking part at all Ordinary General Meetings, and of access to the Library, but no right of voting, discussing, or otherwise interfering in the affairs of The Institution; nor is he called on to contribute to its funds.

STUDENTS (who must not be under eighteen years of age) qualify as such by passing the Preliminary Examination. Candidates for Studentship who can produce a Certificate of having passed one of the Examinations mentioned in the Rules, are exempted from this Examination, and may be admitted by the Council on the recommendation (according to a form) of a Member of The Institution. Students are expected to enter for the Professional Examinations under the conditions laid down in the Rules of Examination.

A Student is entitled to the use of the Library and Loan Library, to attend the Meetings, and to receive the *Transactions*. For further privileges as to fees and percentage of marks, see paragraphs 10, 11, 12, and 14, of the Rules of Examinations.

Candidates who have passed the Intermediate Examination may connect themselves with The Institution by enrol-

ment as PROBATIONERS on payment of an annual subscription of One Guinea. Probationers are entitled to attend Meetings, to use The Institution buildings, Museum and Library, and to receive the *Transactions*. They can retain the position for three years after passing the Intermediate Examination.

Scholarships open to Students and tenable for three years have been instituted of the value of £80 and £50 per annum. Particulars may be obtained from the Secretary of The Institution.

Any person desirous of being admitted into The Institution (excepting to the class of Students) must be proposed and recommended according to a form, in which the full name and qualifications of the candidate must be distinctly specified. This form must be subscribed by him, and signed by at least six Fellows or four Fellows and two Associates, certifying a practical knowledge of the candidate; or by four Members of the Council, of whom the President shall be one, after careful inquiry into the antecedents of the applicant.

The proposal so made, being delivered to the Secretary, will be submitted to the Council, who, on approving the qualifications, will nominate the candidate for election by ballot.

The following are the rates of contribution to the funds:—

	Annual Subscription.				Admission Fee.		
	£	s.	d.		£	s.	d.
<i>Student</i> . . .	1	1	0	.	—		
<i>Probationer</i> , . .	1	1	0	,	—		
<i>Associate</i> . . .	2	2	0	.	3	3	0
<i>Professional Associate</i>	2	2	0	.	3	3	0
<i>Fellow</i> . . .	3	3	0	.	5	5	0

No person can become a Member (other than an Honorary Member) of The Institution unless and until he pays as his first Subscription to The Institution, in the case of becoming a Fellow of The Institution, the sum of Eight Guineas, in the case of becoming a Professional Associate of The Institution, the sum of Five Guineas, and in the case of becoming an Associate of The Institution, the sum of Five Guineas.

All Fellows, Professional Associates, and Associates are required, within twelve months after their election, to deliver to the Council an original Paper on some subject connected with the profession, or to make a donation to the Library or Collection.

The affairs of The Institution are under the management of a Council, which is elected annually, consisting of a President, four Vice-Presidents, sixteen Fellows, two Professional Associates, and two Associates.

The Session of The Institution commences annually on the second Monday in November, and continues to the end of May. The Ordinary General Meetings are held as far as possible on alternate Mondays during the Session. At these Meetings original communications are read on professional subjects, and their merits fully and freely discussed. Every Member has the privilege of introducing visitors to these Meetings. Members are entitled to a copy of any printed publication issued by The Institution after their admission.

11. 3. 16

THE OPENING ADDRESS

BY

GEORGE FRANCIS STEWART (PRESIDENT),

READ AT THE ORDINARY GENERAL MEETING OF

THE SURVEYORS' INSTITUTION,

13TH NOVEMBER, 1916.

GENTLEMEN,—

As I am the first Member of your Irish Branch to occupy the distinguished position of President of The Surveyors' Institution, I think you will probably expect me to deal with the subject which has occupied much of the time and attention of your Irish Members for the last thirty years, and which has very largely affected their position and prospects as land agents. I allude to the question of Land Purchase.

The purchase of land in Ireland is now practically confined to the operations of the two great Acts of 1903 and 1909, under which more than half of the estimated agricultural land of the country has passed or is passing into the hands of the occupying tenants. In comparison with the activity of these two statutes, all previous Land Acts may be considered as being either dormant or dead. But it is impossible to understand clearly even the chief functions of the Wyndham and Birrell Acts (as these are popularly called) without having some idea of the main provisions of their predecessors; and these in turn

demand some knowledge of the social, political, and economic conditions which brought them about. To trace all these influences to their source would be to rewrite the history of Ireland—a task which would exceed the limits both of my time and your patience; so that if for present purposes I confine myself to the immediate cause of Irish Land Legislation, you will understand I do not assert it is the only cause. I shall try to describe the grounds on which public interference in the private bargain between landlord and tenant was originally based; to indicate as rapidly as possible the steps which led through State fixing of fair rents to State aid in land purchase; and then to consider with rather more detail how land purchase is actually being carried on in Ireland at the present day.

With this limitation, it will only be necessary for us to go back half a century. At that period there was one broad difference between the condition of the English and Irish tenant farmer. As a matter of practice the English tenant would not dream of taking up a farm without a suitable farmhouse and outbuildings, without the necessary equipment of roads, fences, gates, &c. In Ireland the custom was different. Such things were described as “improvements.”

And in the majority of cases the tenant had to construct and keep these essentials in repair for himself, and when he had done so his landlord could, if he were so minded, raise the rent of the farm so improved; on the other hand, there were many cases to my own knowledge where the landlord spent very large sums both on buildings and in drainage and fencing for the benefit of his tenants, charging them either nothing at all or else a very small rate of interest on the outlay. Still the tenant was, at any rate legally, at a disadvantage as

compared with tenants in this country, and it was unfortunately the interest of certain persons to exaggerate and emphasise this disadvantage. The great landowning families were, as a rule, above taking unfair advantage of their legal position. Tenants who held under them were safe in their hands, but unfortunately there was a distinct number of owners to whom this remark does not apply, men who had bought their estates perhaps through the Encumbered Estates Court as a pure financial speculation, or men who were desperately embarrassed themselves and were almost driven by circumstances to apply the screw to their tenants. As against these the tenant was practically without legal protection.

I should here, perhaps, mention that a custom known as "tenant-right" (unrecognised by the law but widely operative) had grown up, principally in Ulster, but by no means confined to that province. By it a tenant, quitting his holding for any reason, had a right to sell his interest in it to an incoming tenant, and thus compensate himself for any improvements he might have made.

This was the state of affairs which led to the first important Irish Land Act—that of 1870. It gave compensation for disturbance and loss of improvements; but it was hedged round with many restrictions and exceptions, and was largely inoperative. It paved the way, however, for the Act of 1881, which for the first time completely recognised and secured the tenant's interest in his holding. It gave him fixity of tenure at a fair rent—or, as I prefer to call it, a judicial rent—estimated by an independent court, the Irish Land Commission, which was established for that purpose. The rent so estimated was fixed for fifteen years, after

which it could be brought up again for revision for a second similar term; and before the end of the century over 328,000 judicial rents had been fixed for a first term and over 52,000 for a second, the average reduction from the original rents being 20·8 per cent. in the former case and 22·4 per cent. in the latter.

So heavy a fall in landlords' incomes naturally inclined many of them to consider favourably any method of selling their interests in their property. Some progress in this direction was made by both the Acts of 1870 and 1881, which provided machinery for advancing a *portion* of the purchase money to tenants desirous of buying out their holdings. For various reasons, however, only about 1,600 tenants availed themselves of these provisions, and it is to Lord Ashbourne we owe a debt of gratitude for the beginning of land purchase on the larger scale. He was the legal parent of the Act of 1885, under which the Land Commission was for the first time empowered to advance the entire purchase money of holdings, subject to the retention of one-fifth as guarantee deposit, to be drawn on if the tenant failed in paying his annuity. This retained portion was released to the vendor when the tenant had repaid a similar amount by means of the sinking fund included in his annual instalment. The annuity wiped out the original debt at the end of forty-nine years, and the tenant became free of all further liability on that head. Under the original Ashbourne Act and three small amending Acts which were subsequently passed, advances amounting to nearly £10,000,000 were made to 25,367 tenants for the purchase of their holdings.

The next two Acts—the “Balfour” Acts of 1891 and 1896—are noteworthy from our point of view chiefly in their financial aspects. Up to this time the landlord

had received his purchase money in cash; he was now to be paid in a guaranteed $2\frac{3}{4}$ per cent. Land Stock, which he could exchange, if he chose, for Consols. The loss, if any, on the flotation of the stock and that incurred by default in the payment of tenants' annuities, fell, in the first instance, on a special Land Purchase Account; then on a new Guarantee Fund created by the Act; and, finally, by a rather complicated arrangement, upon the ratepayers of the county. The landlord was thus freed from responsibility for the due performance of the tenant's contract, while, by the second of these two Acts, the tenant obtained periodic reductions in the annuity, which, however, he had to pay for a correspondingly longer term. Under the Balfour Acts 46,834 holdings were purchased by occupying tenants for a total purchase money of £13,401,226. Up to the close of the nineteenth century something under £24,000,000 of public money was advanced to nearly 74,000 tenants for the purchase of their holdings.

In the year 1902, at the instigation of Mr. Wyndham, then Chief Secretary for Ireland, an inquiry was made into the working and results of the land purchase system and a report presented to the House of Commons, which showed clearly the general success of the Land Acts and the reasons for their occasional failure. Upon this report and the results of a round table conference promoted by Sir Horace Plunkett, and attended by representatives of both landlords and tenants, the Act of 1903 was largely based. It secured to the tenant a reduction in the rate of his annuity to $3\frac{1}{4}$ per cent. from the 4 per cent. of the Balfour Acts, while, to bridge the gap between what the tenant was willing to give and the landlord could afford to take, the Government allowed the vendor a bonus of 12 per cent. on the

amount of the advance. All payments were to be made in cash, and the sale of "estates" through the Estates Commissioners was substituted for that of separate holdings through the Land Commission proper, of which, practically speaking, they form a branch.

I must here warn you against interpreting the word "estate" in its usual everyday sense. In several instances the Land Acts have placed technical meanings upon common phrases, such as "fair rent," which we have already found to mean a rent which the Land Commission considers fair. So here an estate does not necessarily mean a landlord's entire property, or even all the lands he owns in a particular county or district. A "separate estate" under the 1903 Act is what the Estates Commissioners think fit to declare to be such, and may be anything from a single holding to a considerable fraction of a county. But I think I can explain more clearly how this and the other main provisions of the Act work out in practice if you will permit me to take an imaginary case and follow it through its various stages to the distribution of the purchase money.

Imagine then, if you please, that a landlord for whom I have been acting as agent is about to sell his estate. We have decided approximately on the terms we can offer, and I call a meeting of the tenants to discuss them. They, on their part, have probably elected a committee to represent them, and incidentally I may say it was frequently an advantage to find the parish priest, or some other leading man, such as a solicitor, acting on their behalf. Such a man may be able to see both sides of a bargain and not to insist upon all the advantages falling on its own. At the worst he brings a whole swarm of opposite and contradictory

demands into some kind of unity. With him you may know where you are. But when you have to deal with tenants singly you can often only satisfy one by displeasing another, and the fact that you must come to terms with practically all the tenants on the property in order to have it declared an "estate" greatly increases the difficulty of negotiations. No sooner have you come to terms with B than A is up in arms to secure further concessions. But when you have a strong representative to deal with, you know that when once the agreement is made it will in all probability be kept. His assistance is particularly valuable when there are any questions of turbary to be dealt with, for there is no point upon which an Irish tenant is so likely to be completely unreasonable and exacting. Six ordinary estates do not involve so much trouble in negotiation as the division of one bog-land. Finally we come to terms. Agreements on the prescribed forms are drawn up and signed by vendor and tenants and lodged in the office of the Estates Commissioners together with an originating application, a map on the six-inch Ordnance scale, showing all the holdings, schedules of areas and tenancies, and a certificate that the vendor is a person who may, *prima facie*, be dealt with as the owner of the estate. Then comes the weary waiting time, usually extending to several years, before any further move is possible. I have cases in my own office in which the agreements were signed and lodged in 1906 and which are still waiting their turn for completion. During this period the Land Commission collect interest in lieu of rent from the tenants at whatever rate has been agreed upon, and pay it to the vendor. Eventually our case reaches its turn, and the Estates Commissioners consider whether they will declare it an "estate," and

here an important provision of the Act comes into effect. If a tenant has had a "fair rent" judicially fixed before 1896, and if the price now agreed on is such that the annuity on it is from 20 per cent. to 40 per cent. less than the rent, or if the rent was judicially fixed since 1896, and the annuity is from 10 per cent. to 30 per cent. less than the rent, the Act deems the holding good security for the advance, and the price equitable. The Commissioners are obliged to make the full advance without further inquiry. Holdings not coming inside these "zones"—as they are called—are subject to inspection and the whole or portion of the purchase money agreed upon may be advanced at the Commissioners' discretion.

As a result, then, of the inspector's report the Commissioners issue queries for us to answer. They deal with advances in non-zone cases, change of tenants' interest, division of bog, complaints about boundaries, disputes about grazing, and so on; and when these are answered to their satisfaction they sanction the advances. In the meanwhile they have issued notices to all interested parties of their intention to deal with the estate; and when the time allowed for objection has expired, and no objection has been made, the holdings are vested in the tenants, and the purchase money paid into the Bank of Ireland to the credit of the estate. Simultaneously with these proceedings the Land Commission examiner has been reading the title to the estate and investigating the charges upon it. All these are set out in a final schedule which, after being settled and approved by the examiner, and after further notice to the incumbrances, is brought before the Land Commission judge, who thereupon allocates the funds in court amongst the various claimants.

This is a sale under Section 1 of the Act; but there is another procedure open to us under Section 6. We could request the Estates Commissioners to buy the estate from us in bulk; in which case they would conduct the negotiations with the tenants, and make us an offer; and if the owner accepted this offer they would pay him the purchase money and vest the estate in themselves, subsequently reselling it to the tenants after carrying out whatever improvements on the holdings they might think advisable. This is the method adopted also in sales through the Congested Districts Board which practically controls land purchase in certain defined portions of Ireland, mostly the poorer portions of the west and south.

I have said that this was the most important of the Land Acts: a few figures will give you some idea of the scope of its work. Up to 31st March, 1915—the latest date to which full figures are available—£52,125,236 was advanced in 5,761 estates for the purchase of 141,022 holdings, and about 2,000 estates representing advances amounting to £19,966,101 still remained to be dealt with. The Commissioners had purchased 755 estates for £7,859,891 to resell to approximately 27,000 tenants; and the Congested Districts Board had bought 231 estates for £2,517,542 to resell to 13,000 tenants.

Of the Evicted Tenants Acts, 1907-8, I need say little; the reasons for their existence were more political than economic. They enabled the Estates Commissioners to acquire land compulsorily for the reinstatement of evicted tenants, and 91 estates were so acquired for a purchase money of £318,640.

There is little doubt that sooner or later practically all the saleable land in Ireland would have been dealt with under the Act of 1903 if the terms which had

proved acceptable to both landlord and tenant had remained unaltered. But unfortunately the terms did not remain unaltered. The rate of bonus was subject to revision every five years, and towards the end of that period it became evident that on the 12 per cent. basis a much larger sum would be required than the £12,000,000 provided by the Act. The Treasury accordingly reduced the rate to 3 per cent. This was a serious matter for vendors, and put the first check on the operations of land purchase. The second came from a different quarter. The financial provisions of the Wyndham Act were modelled upon those of the Balfour Acts already referred to; loss incurred in the flotation of stock to provide the necessary funds fell, in the first instance, on a special Development Grant, and when that was exhausted upon the Guarantee Fund, and thus upon the ratepayer. By 1909 the Development Grant became exhausted, and to finance even pending purchase agreements would have required an annual sum of about a quarter of a million pounds sterling to be drawn from the Irish ratepayer. In these circumstances Mr. Birrell introduced his Land Act of 1909. By it the Treasury assumed the burden of the loss incurred by the flotation of stock, while as to all agreements entered into after the passing of the Act the tenant's annuity was raised from $3\frac{1}{4}$ per cent. to $3\frac{1}{2}$ per cent., and the vendor was to be paid in 3 per cent. stock instead of cash.

The bonus on such agreements was to be calculated on a sliding scale in inverse proportion to the number of years' purchase of the rent obtained for the holding, and ranged from 18 per cent. when the advance was under 16 years' purchase of the rent down to nothing when it was over 24 years' purchase. The Act also increased the powers of the Estates Commissioners and the Con-

gested Districts Board in the way of compulsory purchase; and as regards the large arrear of pending sales then existing, it provided a scheme whereby vendors who were willing to accept half or all of their purchase money in $2\frac{3}{4}$ per cent. Stock at 92 were given a special priority of payment. The raising of the annuity, the alteration in the bonus, and the change from cash payment to stock all combined to discourage further sales—a state of affairs which was made still worse by the outbreak of war and the fall in “gilt-edged” securities, 3 per cent. Land Stock being, at the present moment, only worth 58 and practically unsaleable at that. Out of 2,093 estates lodged under the 1909 Act up to March, 1915, 1,437—or more than two-thirds—were residues of estates dealt with under the Act of 1903 and which, presumably, the vendors were anxious to get off their hands to avoid the expense and trouble of collecting rents from a few isolated holdings. Operations under the Act of 1909 in the first six years of its existence were less than one-eighth of those that took place under the 1903 Act in a similar period. On the 31st of March of last year the Estates Commissioners had advanced £3,348,846 of 3 per cent. Stock for the purchase of 10,856 holdings; and they had bought 114 estates for £406,687 of 3 per cent. Stock to resell to the tenants. The Congested Districts Board had paid £1,160,133 (3 per cent. Stock) for 126 estates to resell to 7,211 tenants; and £840,211 (3 per cent. Stock) was expended on compulsory purchase under the 1909 Act. The Evicted Tenants Acts had, up to the same date, accounted for £318,640 cash.

To summarise the results of the various Land Acts to the present day: Under the Acts from 1870 to 1896, £23,894,765 was advanced for the purchase of 73,809

holdings comprising 2,508,937 acres; under the Acts 1903-1909, on 31st March, 1915, £68,859,962 had been advanced for the purchase of 208,139 holdings comprising 6,906,667 acres; and 102,618 holdings comprising 3,237,428 acres, and requiring a purchase money of approximately £25,300,000, for which purchase agreements had been lodged, still remained to be dealt with. The total land in Ireland valued as agricultural is 18,739,644 acres, of which 12,653,032, or nearly two-thirds, have thus come under the operation of the Land Acts. The price paid for holdings vested under the 1903 Act averaged 22·4 years' purchase of the rent, and for those vested under the 1909 Act 20·3 years' purchase, while the annuities represented a reduction from the rents of 27·8 per cent. in the former case and 30·7 per cent. in the latter.

One of the most gratifying features of the Acts has been the punctuality with which the tenant purchasers have paid their annuities. In the financial year 1914-1915 a total sum of £2,844,122, including arrears, had to be collected, and of this only £14,206, or a shade under $\frac{1}{2}$ per cent., remained outstanding on the 31st July, 1915. Land purchase, owing to the war and financial conditions arising out of it, is almost at a standstill at present. This is a great misfortune for all concerned, and it is much to be desired that some financial scheme should be devised which would enable at least the cases now pending to be taken up and completed. I cannot believe that it is beyond the wit of man to devise such a scheme.

In conclusion, I should like to say a few words about the persons most concerned in this great work of transferring the soil of Ireland to the occupiers of the land.

First of all the *Land Commission*, who have the

official carrying out of the transfer. I have no desire to be critical. They have done a very great work and I am sure they have had great difficulties to overcome. Personally I am indebted to them for much help and civility received at their hands, but I do think the delays might have been lessened, and that would have meant an enormous saving to all concerned. I think, too, they are unreasonable in holding, *as I believe they do*, that the State should run no risk of making a bad debt, and with that in mind cutting down the advances outside the "zones" to a minimum figure, in many cases far below what the tenant who occupied and knew the land had voluntarily agreed to pay. The fact that the vendor is leaving them for good at the conclusion of the sale while the tenant purchaser is staying with them for $68\frac{1}{2}$ years makes them lean, perhaps unconsciously, towards the latter, and insist on the former carrying out large improvement works which formed no part of the bargain with the tenants and which were never contemplated when the purchase price was agreed upon. These improvements have to be carried out by the vendor before his property is passed as "an estate," but they are for the exclusive benefit of the purchaser whose rent (and consequently whose purchase money) was fixed on the basis of their non-existence. This I think is certainly inequitable.

Secondly, *the Tenants*. They have undoubtedly gained enormously. They have become fee simple owners of their farms subject to terminable annuities, not exceeding on the average about half the rent they used to pay before the Land Acts came into operation. They have an absolute right of sale, and though a mortgage for more than ten times the new annuity is illegal, there is no limit to the price that may be obtained for

their interest. Forty years' purchase of the annuity is by no means uncommon, and many farms are changing hands, though as yet there is no sign of any large consolidation of holdings in one owner, or of a new race of landlord springing up. In consequence partly of the reduction in their rent—for the new annuity may be regarded as a terminable rent—and partly under the stimulus of ownership, the tenants have most undoubtedly improved their dwelling-houses, offices and farms generally, and it is a real pleasure to observe this when visiting an estate one has been instrumental in selling. Except in the case of the very smallest tenant, to whom the gain of a reduction in his rent meant only a pound or two, while the loss of his former landlord's assistance meant a great deal more, I have never yet met any farmer who regretted having purchased. They are now the real owners of the country, as was pointed out to them on many recruiting platforms, and if they have not yet risen to a full realisation of their position and responsibilities, it is to be hoped they may do so in the not distant future.

What the tenants have gained the landlords have to a large extent lost. The State has, of course, borne a part of the financial loss, but the greater part of it, as well as all the incidental losses, have fallen upon the landlord. Formerly he had the status of an owner of landed property; the Land Acts turned him into a rent-charger, and now the Purchase Acts have had the effect of severing him entirely from his former estates. Financially he has been a great loser, and this has forced many of the smaller landowners to shut up or sell their country houses. When sold these places are purchased either by neighbouring farmers or by Irishmen who have made money in America and returned to spend the

evening of their lives in the "Old Country." The loss of the families thus expropriated is, in my opinion, a very real one for a country like Ireland. The men did their duty as magistrates and country gentlemen in their district, the ladies exercised a kindly and benevolent influence, and the whole country is the poorer for their absence. The owners of the great demesnes have, of course, not felt the pinch to the same extent, but their estates were naturally a great interest to most of them, and now that this interest is removed it is questionable whether they will spend as much of their time in their Irish country houses as they formerly did. For the good of the country one can only hope they may. Much will depend upon whether their demesnes and home farms are interfered with by legislation or otherwise.

The third and last class affected are the *Land Agents*. It is easy to see that this class is being wiped out, except in the case of those who manage town property, or land which for some exceptional reason does not come within the Purchase Acts. Very few younger men now think of entering the profession, and the elder men already in it would have been great sufferers but for the generosity with which in the great majority of cases the land-owners treated them. Many of the owners who sold recompensed their agents out of the bonus, which was indeed to some limited extent intended for that purpose, while others approved of the Estates Commissioners putting into effect the clause in the Wyndham Act which authorised the remuneration of the agent who negotiated the sale out of the purchase money of the estate.

The loss of a body of educated business men accustomed to responsibility will naturally, in my judgment, I being one of them myself, be a loss to Ireland. It

must also mean some loss of membership to the Irish Branch of this Institution, but on this point I am glad to be able to state that owing to an increase in the number of members representing the valuing and building side of our profession, the total decrease has not been large, and our membership in Ireland has so far not been substantially reduced.

I cannot sit down without a word upon the subject that is in all our thoughts—the war. This Institution, as our then President informed us last year, has given very freely of its members to the Forces of the Crown. I understand that those who have thus come forward to serve their country now number over 2,000. There is probably not one amongst us to-night who has not a son or a brother in the fight. Many of them have, alas! paid their last debt of duty to the country they loved so well. It is my earnest hope and confidence that when your next President comes to address you, this terrible ordeal will be over and we shall once more know the blessing of Peace—with Honour.

Sir JOHN F. L. ROLLESTON (Past-President) said he had much pleasure in asking them to pass a very cordial vote of thanks to their President, Mr. Stewart, for the interesting and instructive Address just delivered. It largely dealt with one of the chief works of domestic legislation that had ever been passed in the Parliament of the United Kingdom for the benefit of their sister country.

But before he referred to that further he must express their gratification that the Chair of The Institution was occupied, for the first time, by a colleague from their Irish Branch—a President whom they welcomed,

not only because he was a Member of that Branch, but because he, as a Member of their Institution, had attained distinction in his own country for many years past, and by his numerous activities and public work not only conferred honour upon them by his membership, but had also rendered signal service to Ireland and the United Kingdom as well.

He had read and heard that, in the past, it had been a matter of general belief in Ireland that Providence had endowed Irishmen with capacities of a very exalted order, but that those high qualities had remained somewhat undeveloped owing to the disadvantages of British rule. He had also heard that it had been taken for granted that the sons of Erin came to the front, as a matter of course, in every path of life throughout the world, in every country but their own. If that, too, was attributed to the disadvantage of British connection, he only hoped in these later days feeling was changing in regard to this country. Here at least they had an illustration that a gifted Irishman had attained honour in his own country and came there to share it with them and to confer it upon them, as well as to receive it, in the position in which they were proud to have placed him.

It was noteworthy that the first President of The Institution from the Irish Branch should come almost concurrently with the separation of the government of the two countries—at least on paper. But as our King had attached his signature to that “scrap of paper,” it was to be anticipated that they must look forward, with great regret, to some alteration in the relations of the two countries in the future. He had suffered some years of extreme discomfort in close attendance in the House of Commons in the endeavour to prevent that degree

of separation (whatever it might ultimately be) which now took its place amongst the statutes of the United Kingdom.

The President's Address, dealing as it did with the history of Irish land for the last half-century, would be a classic amongst the literature of The Institution. His own first contact with that subject was during the passage of the Wyndham Act in 1903, which he had the privilege of supporting in all its stages, and he thought the President would agree that it would have settled promptly, and for all time, the land question in Ireland if it had been allowed to accomplish its beneficent purpose; but according to the rules of what was once party Government, the Government of one Party usually sought to undo the work of the other, and so the statesmanship, wisdom, and foresight of the Wyndham Act was deprived somewhat of its completeness by the Government which succeeded that of Mr. Balfour in 1906.

Those who were acquainted with the administration of land in this country, and who had if only a superficial knowledge of Irish land, would recognise that the conditions are different, and that while in this country our occupiers were mainly well content with, and advantaged by, our system of annual tenure, nothing but absolute ownership, qualified by a terminable rent, would ever be satisfactory to the Irish farmer. Their President had told them that two-thirds of the land in Ireland had now been invested in the occupiers, and that although that had necessitated changes, not favourable to the landlords, except on the large estates, where the demesnes and the home farms constituted a sufficient estate in themselves, and although the landlords had lost financially by those changes, yet they must agree that the policy was a right one, and

deserved the approval which their President had conferred upon it.

During the passage of the Wyndham Act he remembered with pleasure that he made the acquaintance of a number of the Irish agents, Members of that Institution, amongst them their President, who wished him to put down various amendments in Committee safeguarding their interests.

He was sorry to say that in those first few years of his parliamentary life he was not so versed in procedure as he was in later years, but still he did not think from the bad temper in which those amendments were mostly received that even the most expert parliamentarian at that time could have made any amendment designed to safeguard the agent acceptable to the Irish Nationalists, and he had always felt conscious, and regretful, that in the Wyndham Act the agents were somewhat thrown to the wolves, full of good purpose as that Act otherwise was. He was glad therefore to hear from their President that other lines of the surveyors' profession had been opened out to them, and that they were not likely to lose them to any great extent as valued colleagues and members of that Institution.

He had heard a rumour that their President had, like some of them there, devoted some of his valuable time to politics—politics which were described by an illustrious author as “the business of the idle, and the idleness of the busy,” and if that were at all the case, they were entitled to wonder if they would be likely to be able to exhibit their President of this year in the near future, amongst the many distinguished people who attended their annual functions, as what must be in this age a novelty and a curiosity—a Member of the Irish Parliament.

Personally he would rather see him a member of the Parliament of the United Kingdom, in which assembly they were assured he would effect most useful service; but in whatever direction his energies and abilities might lead him, they would follow him with the same good wishes as those with which they greeted him as their President that night, and would hope that he might have many years of life and health in which to pursue, what they had every confidence would be, a still further prosperous and distinguished career.

MR. ARTHUR L. RYDE (Vice-President) had much pleasure in seconding the vote of thanks to the President. The Address, he thought, was one of the most valuable additions to the *Transactions* of The Institution that they had had for some time. It gave them in a concise and readable form a kind of history of the Irish Land Acts which was very much wanted. It had always been a matter of astonishment to him as to why the Irish tenant took a farm without having suitable buildings erected on it; possibly it was due to the difference between the Irish and English temperament. An Englishman never took a farm without having proper buildings erected on it, and he supposed it was for that reason that the Irish Land Acts came into existence.

A seconder never found himself in a very happy position, for generally, he found, that what he was to say had already been said by the proposer. There was one thing, however, Sir John Rolleston had not said, which he would therefore say. The President had suggested that there might be some danger of Irish land agents being stamped out. It was his opinion, however,

that would never be. There was far too much vitality in the breed for that! They would find occupation, or occupation would be found for them.

The vote of thanks having been put to the Meeting, and carried unanimously,

Mr. ERNEST A. RAWLENCE (Member of Council) desired to ask the President how, in reinstating an evicted tenant, the difficulty of getting rid of a sitting tenant was overcome.

The PRESIDENT replied that it was entirely in the hands of the Land Commissioners, who were given considerable powers. Sometimes they induced the sitting tenant to give up by purchasing for him a larger farm in another place.

Sir John Rolleston had reminded him of the time when, with one or two others, he used rather to persecute Sir John in the House of Commons. He should like to say, and hoped it would be of comfort to Sir John, that they had at the same time persecuted a good many others. They met with extreme kindness both from those from whom they expected it, and also from others from whom they did not so much expect it, but on the whole were extremely well received; and some of the amendments they brought before the House were accepted, which was all that mortals could expect.

He desired to thank all his colleagues present for the kind and attentive way in which they had listened to him whilst trying to expound to them a history of

land purchase in what to many of them, he feared, was a distant country. He was sure, if they would go over to it, they would be gladly welcomed, and given a closer insight into whatever went on in the Emerald Isle.

The proceedings then terminated.

SUGGESTIONS FOR THE IMPROVEMENT OF CATTLE BREEDING IN GREAT BRITAIN.

By K. J. J. MACKENZIE, M.A. (ASSOCIATE)

*(Reader in Agriculture in the University of Cambridge and
Director of the University Farm).*

*Read at the Ordinary General Meeting of THE SURVEYORS'
INSTITUTION, held on Monday, 11th December, 1916.*

GEORGE FRANCIS STEWART (President) in the Chair.

That The Surveyors' Institution should select this subject for one of its meetings in war time is in itself a fact which denotes the importance of the matter about which I am allowed to address you to-day. That I am fortunate enough to have this responsibility put upon me is a rich reward for the thirty years' labour I have given to this very vital department of our agricultural industry.

In asking you to bear with me while I review the history of my subject, I assume that everyone, in these days of earnest thought, feels it is wise to study the doings of our forefathers, so that we may benefit by their experience when suggesting improvements that may be of benefit to the coming agriculturists of "This England" for which so many of our colleagues have given their all. I promise, however, to restrict myself as much as possible.

In starting my retrospect I feel I cannot do better than bring to your notice some words of an eminent historian, Dr. Holland Rose, Reader in Modern History in the University of Cambridge. As will be well known to you, the study of the history of the life-struggle which this country went through rather more than a hundred years ago is one that Dr. Holland Rose has made his own, so that I may, without further introduction, quote from one of his well-known works. On page 196 of his *Napoleonic Studies* he explains how our enemies of those days—1793 to the fall of Napoleon—were mistaken in imagining that Britain was “solely” dependent on foreign trade. He goes on to say of our country :—

“At that time she had two vast reserves of land power at home—improved agriculture and the factory system. Improvements in farming brought about by the enclosures had doubled the yield of corn and the weight of fleece; and these enclosures of common wastes and common fields were stimulated by the high prices of the war period, until in ordinary good years, like those of 1802-1807, home-grown corn nearly sufficed for the increasing population.”

To us to-day the note given on the same page is of even greater importance than the weighty words I have just quoted. I reproduce it in its entirety :—

“In a pamphlet on our agriculture, the author, Mr. Preston, M.P. (London, 1814), points out that the improved breeds of cattle and sheep were ready for the market much sooner than would have been possible with the old breeds. ‘With six-year-old oxen and four-year-old sheep as the only stock to the market, this country would have been totally unequal to produce a supply adequate to the demand, and the war must have been closed from physical inability to continue it.’”

Having read these words from an author sufficiently eminent for Dr. Holland Rose to quote, I will now try to tell you briefly what my investigations into the history of this improvement have taught me.

Bakewell about 1780, by scientific investigation and research, had learnt how to model, by selection and in-breeding, the carcasses of his sheep and cattle on lines that were perfect in the eyes of their proprietor. Unfortunately for the fame of the master, the cattle he owned and improved, or perhaps I may even say created, realised his own ideals better than they met the requirements of the market. And it remained for his disciples to take up and, as far as possible, perfect his work. Among the work of these, that of the brothers Collings is best known. It may be that greater credit is due to others, but historical students of this period have, when writing their story, for some reason or other, left more records of the doings of these workers than of those of their many, doubtless eminent, contemporaries.

The Collings brothers lived, as I conceive it, in a district famous for its deep-milking cattle. The records of their stock having this capacity for milk production are overwhelmingly strong; nevertheless, the cattle seem to have been very faulty in conformation. They were, if my historical imagination serves me well, long in the leg and flat-sided; their conformation was altogether uneconomical; there was a much too large proportion of coarse bone to flesh. They were, further, thin in the skin, short of hair, and withal very slow growing, even for those times. Their chief, if not their only, merit as flesh producers seems to have come only in their old age. For we learn that there was a great demand for the carcasses of the old cows among those whose business it was to salt meat for the shipowners. In those days of

sailing ships meat for the long voyages had indeed to be salted deep, so that the excessive fat, that we learn the carcasses of these cattle carried, appears to have been useful as a palliative to the digestion of the poor sailors who depended for so many weary days upon this "tack" for nourishment.

The not very promising material I have tried to describe was improved out of all recognition by Robert and Charles Collings and their fellow-workers. These workers gave the name of "Shorthorns" to the breed they created. As far as close study can teach me, their improved shorthorn was short in the leg and deep of body, fine-boned, well fleshed, covered with a moderately thick hide carrying an abundance of "mossy" hair, and last, but not least, was very quick growing.

This crude statement may make the transformation sound almost miraculous, but that it is not exaggerated is shown by the following facts: (i.) The bull to whom the greatest part of the improvement is said to be due cost £8, his descendants were sold by the brothers Collings at prices ranging from £50 to £1,000. (ii.) At the present day the descendants of the improved shorthorn in this country number more than twice the individuals belonging to all other breeds put together.

The evidence is not very clear as to the effect that the improvement in frame, hide, and growth had upon the milking capacity of this stock. No authority, as far as can be gathered, ever claimed that the cattle were improved in this respect. I am inclined to think that in the following quotation from Sir John Sinclair we indirectly get evidence of what happened; the words which I have emphasised are to my mind illuminating:—

“Whether a particular breed ought to be kept up for that sole purpose [milk], or whether it is preferable

to have stock partly calculated for the butcher and partly for the dairy, is a point well entitled to the most deliberate discussion. It is probable that, by great attention, a breed might be reared, the males of which might be well calculated, in every respect, for the shambles, and the females of which might, when young, produce abundant quantities of good milk, yet, when they reached eight or nine years of age, might be easily fattened. This would be the most valuable breed that could be propagated in any country, and indeed some of the best English and Scotch breeds have almost reached that point of perfection." *

Whether I am right or not in my deduction from Sir J. Sinclair's words, I am able to state that in a well-known book† published in 1808 I find these words under the interesting heading "Dutch on [or] Short-horned Breed":—

"Specific characters . . . They possess, however, the valuable property of fattening kindly, and yielding large quantities both of milk and of tallow."

Furthermore, authorities, without exception, from that date, 1808 down to about 1880, have done one of two things: either they have claimed boldly the dual-purpose capacity for shorthorns, or they have warned their readers of the foolishness of neglecting the milk-producing qualities of cows of the breed.

Time makes it necessary for me to be very brief, so I am going to single out three great breeders who worked on improvement subsequent to the Napoleonic era—Bates,

* *Essays on Agriculture, &c.* Sir John Sinclair. Printed by A. Strahan, New Square, for T. Cadell, Junior, and W. Davis in the Strand. Second Edition, 1818. [The date of this essay was 25th January, 1802. See page 64. The black type is my own.—K. J. J. M.]

† *The Complete Grazier, &c.* By a Lincolnshire Grazier. London: B. Crosby and Company, Stationers' Court. 1808.

Booth, and Cruickshank. I think very few words are wanted to describe their work. Bates bred for style or character or quality, call it what you will, and milk with beef. The Booths—for here history repeats itself, and we find there was more than one member of that family working for the good of the breed—bred for beef, style, and milk. Cruickshank selected with a view to improve constitution, and then tried to get firm flesh and milk. After Booth and Bates had started, Coates began recording and publishing the pedigrees of these cattle, and lineage became and remains a tremendous power for good or for evil in the history of the improvement of shorthorn cattle. This is another way of saying that pedigree had effect for weal or for woe among the great majority of cattle breeders in this country.

Cruickshank was about at the summit of his fame as a breeder, say, in 1880, when a very potent influence began to be felt. The homes of the shorthorn herds of Great Britain and Ireland were subjected to an invasion of purchasers from overseas—to wit, from the republics of South America. These purchasers—and they carried deep purses—had views of their own. They demanded beef, constitution, and colour, to which later on they added long pedigree. The dual-purpose capacity had no charm for them; in fact the deep milker was very objectionable in their pastoral industry. I need not tell this audience that the skilful breeder who could meet their demands was not wanting in Great Britain. But unfortunately the history does not end here. The cattle demanded by overseas customers became the fashion, and those who could have afforded to neglect the long cheques from the Argentine, and breed for the requirements of our tenant farmers, failed to do so. The foreigner, who was the English farmer's competitor as a

meat producer, ruled our show yards to a very serious extent, though, as is always the case, there were many admirable exceptions among our agriculturists.

Towards the end of the first decade of the present century things agricultural, as is well known to you, got better, prices improved, and farmers had a little spare cash with which to buy sires to improve their herds. Nevertheless, what was happening at many, only too many, public sales? Many bulls not wanted for export, or by breeders anxious to supply that market, were not bought by the tenant farmers surrounding the ringside. They were indeed bought in considerable numbers by wholesale butchers to convert into inferior beef. I am now speaking of what I saw happening between 1904 and 1910.

It is idle, I contend, to put the whole blame on the farmer as unfortunately some authorities do. Our practitioners in agriculture were quite clever enough not to have made a present of these pedigree bulls to the wholesale butcher had these animals been suitable to their purpose.

Obviously the fault was not all on one side. Had the farmers of our country gone on purchasing the bulls they required at anything like a remunerative price to the pedigree breeders, these latter would not have fallen so easily a prey to the overseas customer.

No doubt there were faults on both sides; the pedigree breeder paying far too much attention to the foreign market to the neglect of the home demand, and the farmer ignoring any advantage that was to be got from the use of pure-bred sires, because those suiting his requirements were hard to find, though not by any means unobtainable or even very high priced. It is, however, needless to say that again there were many

splendid exceptions on both sides. Still, let the fault be where it may, the result is bad. For though this country is rightly regarded by foreign breeders as the stud-farm of the world, our commercial stock is as mixed as it is possible to be. I have no hesitation in saying that a large proportion of our commercial cattle are as bad as any to be found in Europe. Most regretfully one must express the belief that the historian of these terrible times will not be able to give any praise for the existing state of affairs.

The future must now be considered. It seems to me that if we are to avoid the errors of the past, the first thing to do is to ascertain more definitely what are the requirements of the various districts of this country. Many agriculturists, like myself, have been much impressed by the study of the conditions of cattle husbandry in Holland. The Dutch require an animal that can breed calves that will make good veal, that will yield a large supply of milk, and then make a decent carcase of cow-beef when the full milk-producing career is finished. Animals that do not fulfil all three of these conditions are the exception in that country. The *uniformity* of their stock is the wonder of all Britishers visiting the cow, fat cow, or veal markets in Holland for the first time. I confess it was a revelation to me. It would be mock modesty, however, to pretend that we do not find better individual animals in our own markets, but the rubbish associated with them is almost absent in Holland. The Dutch, however, ignore one product—that is, steer-beef. This, I contend, is of too much importance to our agriculture for us to neglect it. Our national style of living is too high to allow of cow-beef being substituted for prime, and further, a very large proportion of our farmers require some store cattle for winter feeding. In

this respect, however, I am one of those who hold that this demand ought not to be so great in the future as it has been in the past, but I believe it will always exist to a considerable extent.

But let that be as time will show. For the present we want in certain districts larger numbers of animals that meet the requirements of the locality. It is the business of all interested to find out what those requirements are, and having got the information, to see that stock wherewith to breed the required animals are within the reach of all the farmers. I suggest to you that the Live Stock Improvement Scheme of the Board of Agriculture and Fisheries carried on with the Development Fund makes it for the first time possible to acquire information as well as to meet the demand. Bulls at a reasonable fee are useful, and more particularly so among those general farmers—whatever the size of their holding—who *do not* keep a large enough herd to warrant the use of a good sire for themselves, and under this Improvement of Live Stock Scheme the Government are subsidising bulls all over the kingdom. If, however, the experience of the work of the pedigree breeders of the past is to be of avail, the results of this large experiment should be systematised. For there are innumerable instances of large landowners and others placing the services of bulls, eminently suitable, say, for the Argentine trade, at the service of the public with very unfortunate results. As regards our foreign trade, the high prices given by overseas customers, added to the skill and enterprise of our breeders, will always insure proper attention from the specialists in this department of our industry. I defy anyone who has studied this question with an open mind to maintain that the requirement of our practitioners is not in need

of every assistance that systematic investigation can give. To supply the public with bulls and not to ascertain the results of the breeding from such sires is to repeat wholesale what has been done retail with a very limited amount of success.

An investigation should be carried out under some such scheme as the following: All the calves got by the subsidised bulls should be branded, and their identity established by tatooing. Records, where possible, should be taken of their dam's performances at the pail: of their age, size, &c.; or, anyhow, particulars of as many of the calves as possible should be so recorded and their performances eventually tabulated.

To trace the performances of branded calves, frequent exhibitions of this stock should take place. At these exhibitions weights should be ascertained; in the case of store steers some of the prize-winners would have to be purchased, and placed under conditions where careful records could be kept of the food required to maintain and to "finish" them. Again, exhibitions would be held for the fat-stock so kept under observation, as well as for those left on the farms, and the meat salesman might be brought in to give his opinion of the finished result. In the case of the heifer calves, further information as to their milking qualifications should, in the process of time, be obtained by means of milking trials, butter tests, &c.

I wonder if it has ever occurred to the agriculturists of this country how badly we are off for *data* on which to work? Take the fat-stock shows. We have in many cases a very valuable collection of figures giving weights of the various breeds at certain ages. But as far as I have been able to find, and I can affirm that my search has been diligent, there is available no authenticated

detail of what it cost in feeding stuffs to produce these weights, either for individuals, for different varieties, or for older or younger animals. The *Farmers' Magazine* of 1839 has many letters from agriculturists protesting against the extravagance of these shows. One writer in this very month of December in that year asserts that all the exhibits come to the show "insolvent." For aught we know they do so still. Probably "length of days" will be held to justify the continuance of these shows. Possibly, as in the case of the athlete in whom it is held to be a virtue to exert himself even to death's door, getting the utmost at any cost out of our stock may be useful. But it would be very much more useful if we knew the cost of obtaining this utmost. The same remark applies to the cost of milk and butter at the trials and tests at our dairy shows; and when it comes to breeding stock shows, not even the weights of individual animals are recorded. The newly created official live stock officer ought to be put in a position to remedy this state of affairs in the immediate future. The scheme fails in, at any rate, one important branch if this official is not empowered to add considerably to our very meagre pile of useful *data*.

Some such scheme as the one I have outlined would have several other advantages. It would teach us the capability of different varieties of stock under varying conditions, its educational value would be very great in showing farmers, other than the exhibitors, what, and what not, to breed and rear. It would have this further, to my mind incalculable, advantage: it would encourage the payment for quality among those who buy their calves for rearing from the big cow-keeping farmers who sell milk. These latter are in a very peculiar position; they want a dual-purpose cow, that will feed

off well when her duties at the pail are finished. The calf is merely a nuisance to them. The very high prices, and the difficulty of finding deep milkers that will make beef, alone forces them to breed. The calf, and still more the calving, is an unmitigated disadvantage to their industry. At the present time the calves that their business forces them to breed are thrown on the open market, and after sale all trace of them is lost. It is only occasionally that a reputation for breeding good calves brings any financial return. Were an authentic record kept, good calves would soon earn for their breeders a reputation that would make their production a profitable transaction, and avert loss to the rearer. For from the herds kept on the large milk-growing farms many of our most deplorable "stores" now come.

The further advantages of some scheme such as I have very briefly summarised above will be set out, I think, by anticipating and answering the criticisms which experience tells me will be levelled at its proposer.

I will begin with the objections of a large class, not by any means all, of the pedigree breeders who fear any change that may interfere with the practice of to-day. To these I say that it is impossible to serve two masters. The requirements of the British farmer are often quite different to the requirements of his overseas competitors. This is demonstrated by the fact of so many of the young sires bred to supply the foreign trade going to the butcher, while countless mongrels stand at stud or at the head of the herds on our farms big and small. But I have such faith in the skill of our breeders, and the potential worth of their wonderful cattle, that I feel sure that they will meet the demands of the home market

when once they are convinced what is the class of stock wanted, and are ensured a moderately profitable market for their cattle. My hope and belief is that the scheme I suggest will secure them both.

I will just mention one other matter for their special consideration. For the present it is most desirable that pedigree bulls should be used. The collection of "specimens" and "samples" of stock at our markets and fairs show what is the result of using other classes of sires. Again, even if a mongrel bull is successful, his breeding not being recorded and his origin being often unknown, it is not possible to continue to breed on the same "blood line," and consequently his influence for good on his stock is not perpetuated. For fear of being misunderstood I would here say that all these remarks refer to any of our British breeds of cattle. I only signalled out for your consideration the shorthorn as it is the most numerous breed we possess, and the one about which most has been written.

The farmer's objections are much more difficult to meet; the trouble and time required to perfect a scheme of the kind is very great, and the biggest part of the labour will fall upon him.

I do not, however, fear his failure to take up any burden that can justly be put upon him, more especially in such times as these. Reflection will make it evident to him that the Britishers' sense of fair play asks this duty of him, for only too many of his colleagues are in his hands. I refer to the large class of farmers who are feeders, and only feeders, of cattle, totally dependent for their store stock upon those supplied by their colleagues who are breeders or rearers. To protect the cattle of the whole community the law wisely forbids the importation

of store stock much wanted by the feeder. It is, therefore, the duty of those who do not want the store stock, yet who are protected against the importation of disease, to see that their less fortunate colleagues do not suffer through such legislation.

Last, but not least, are the objections of those who will have to put up the money, for it is undeniable that any useful scheme will cause expense. This matter rests with the British public as a whole. If it is worth the country's while to have once again the most flourishing national husbandry possible, money will have to be forthcoming to subsidise increased production. The farmers themselves will have, if the thing is to be a success, to do a great part of the work for nothing. To ask them to do more is for the present hopeless, for obviously financial results from the work cannot be obtained at once. The men who organise the improvement scheme will very probably be the last to receive any financial return, for it was ever so with reformers.

If I have convinced you that reform is needed, there are examples close at hand to show how system can reform, or, in other words, increase production. Three of our neighbours have, by systematic work, proved that this is so. Denmark, Holland, and Belgium have all three so organised things that the general husbandry over the bulk of their countries is nearly equal to our own very best farmers' work. And I need not detain this audience for one second to emphasise how much above the average of general farmers our best husbandmen may be shown to be. With two of these countries, *i.e.*, Denmark and Holland, cattle breeding on a systematic plan has been the bed-rock of their prosperity. It is not too much to say that without their systematic investigation and co-operative breeding, the greater part

of the wealth of those two nations would never have been created.

And now I am going to be more personal. Among us of the Land Agency Branch of this great Institution are to be found those who have a power to influence which is so great as to be beyond the reach of exaggeration. We have among our innumerable clients leading landlords and tenants, and none of us doubt that among these are the most earnest well-wishers to agriculture that can be found. Some of these, again, are leading stock breeders. We are constantly in request as counsellors and advisers, so that it behoves us to consider well what good is done by our country when a champion bull is bred that is sold for £1,000 for, say, the Argentine trade to breed pure beef stock. Such an animal is not wanted for—he is indeed often quite incapable of—siring dual-purpose cows. How the use of such an animal affects our fellow-agriculturists across the water, and so reacts on us, is no concern of mine to-day. But I want my colleagues to bear with me for a few moments while I consider the effect of such breeding on our own commercial cattle, and the effect again of the cattle on our husbandry. Supposing such an animal and his offspring to be used at home for a few generations, and his stock to have become widespread. A herd of cows of such breeding is eminently suitable for purely pastoral purposes. I calculate that if each cow were to give one calf every year, and that calf was kept on till it was a store eighteen to twenty months old, every cow in the herd would want for herself and her produce from 4 to 5 acres of medium grass land. I estimate that, with a very small outlay on labour, the greater part of which would be used for hay-making, and a still smaller outlay for bought food-stuffs, there

would be a gross annual return at good pre-war prices of from £3 16s. to £5 per acre.

Now let me put before you what I believe to be the facts of the case of the herd of good dual-purpose cattle, given the same area for each cow and her produce. Only in this case let about two-fifths of the land be under the plough (I would want, to be more exact, the area to be from 1.5 to 2 acres per cow), and then, I assert, one could with confidence budget for the gross return to be from £7 10s. to £9 5s. per acre. For I contend that such cattle will average a yield of 750 gallons of milk a year. To make a really good store, 100 gallons of this would be wanted for calf rearing. The remaining 650 gallons can safely be quoted as being worth, in *normal times*, 8d. a gallon on the farm, or £21 10s. per annum. As the steer brought up on the pail and home-grown corn would not be worth as much as the one brought up on his mother's milk with some bought food-stuff to carry him through his first winter, there would remain, in my second example, about £18 to pay for the working of about 2 acres of plough land. This would certainly leave a small margin to recoup the farmer for his additional trouble and enterprise.

But it must be prominently borne in mind that it takes good stock to do this, and that the picture would be all out of proportion with a cow only giving 500 gallons of milk, and one whose store would only be worth, say, £12 at eighteen months old, even at good pre-war prices.

We are up against a fundamental principle here. This is, that the largest part of the food is wanted for keeping the animal alive, or, in other words, for sustenance. It is not merely that in my dual-purpose cow estimate we are working the land, but that in her case

she gives a large return for her sustenance. In the case of the pure-beef animal you have the same expense of keeping her alive, but on top of that outlay you do not get the same amount of surplus. The same principle applies to good dual-purpose cattle and poor specimens of that type of animal.

The present state of our breeding herds forces the last mentioned class of inferior stock on very many farmers—I would almost say on all who are not either richer or much more enthusiastic than the average. The capitalist pays for the better ones; the specialist works to secure them. Both have difficulty in securing what they want, and they get them at the expense of their neighbours going short. System, education, and a small subsidy ought to be used, so as to bring cattle of good class to the notice of and within the reach of all competent and moderately endowed farmers.

This leads me to point out that good pre-war prices are assumed both for stores and for milk. With good stores at 32s. per cwt. instead of 40s., and milk at 6d. on the farm instead of 8d., the gross return on 5 acres of land—2 under the plough and 3 in permanent grass—would mean a figure round about £6 10s. per acre gross return. This, if any decent standard of living is to be kept up among the agricultural community as a whole, cannot be said to promise any additional reward to the farmer for keeping better stock, putting more capital into his business, and taking very much more trouble. At the same time these prices make the figures from the return from the pure-beef animal's produce look very ugly; for I have taken a price of £2 per cwt. on hoof for stores as my datum in my two examples.

My ambition is to get my fellow-Members of this Institution to examine my figures and scrutinise my asser-

tions. If they find that I am right, I know I can trust them to bring these matters to the notice of our clients whose anxiety for improvement might, I know, be made every bit as great as our own. Once the interest of clients is assured, we may look to them to give us invaluable help in awakening the interest of the lay public: for all are wanted in helping this movement. We have got to go back to the Bakewell era, and combine practice with science, only very much more so; for Bakewell, when taking his measurements and preserving his specimen joints so as to be able to compare and follow up the performances of one generation after another, only had the improvement of his own herd on his own farm in view. We now have to work on several breeds spread throughout numerous districts, counties, and even countries. We shall probably have little immediate result, probably we shall find many districts unsuited to dual-purpose cattle, some there most certainly are if viewed from pre-war prices; but I believe the time is ripe for this Institution to use all its authority to urge an immediate beginning.

I do not believe that any thinking man will deny that the state our home-production had got into had great effect in bringing about this war. Most unfortunately I know from personal experience what trouble our enemies took to find out how much our Home and Eastern Counties land was producing before they attacked us. This is why I was able to tell you at the beginning of this Paper that the privilege of speaking to you to-day was a rich reward for the labours of thirty years' work, which, though it has in the main been a labour of love, has often been arduous, disappointing, and entailing some self-denial. For I feel that anyone who, in however small a way, helps the

future to produce more food in this country, is doing something to further the efforts of those who have died for us and the Empire they loved so well.

The PRESIDENT said, before asking Mr. Edgar Horne to propose a vote of thanks to the lecturer, he should like to be allowed, for a moment, as President of The Institution, to refer to the appointment of Mr. Rowland Prothero as President of the Board of Agriculture.

Mr. Prothero was a man of the soundest judgment, of great learning, and an intimate knowledge of the whole agricultural question. No appointment could do more to secure the confidence of both owners and tenants in this country, and he thought they had every reason to congratulate The Institution and the country on his appointment.

Mr. EDGAR HORNE, M.P. (Past-President), had much pleasure in proposing a vote of thanks to Mr. Mackenzie for his valuable Paper, which he was sure would be of great assistance to those who were interested in the breeding of cattle.

He understood that it was really a plea for the pedigree shorthorn, milking, and dual-purpose cow. It was a breed that he had been interested in for some years. There were certain difficulties connected with it. For instance, it was very important that the bull used should come of a milking breed itself. If a breed were used that only went for beef, the herd would be ruined in a very short time, and would not get the milk back again easily. Also, when breeding for a dairy, cows had to be put to the bulls at all seasons of the year and have calves at all seasons of the year, an unnatural state of things for the beast which did not help in any way to

strengthen its constitution. Again, for a dairy one had rather to strain the cows. As much milk as possible was wanted. If milk was the object it was necessary to get cows that were good milkers and to discard those that were not. Both those requirements, he thought, tended to injure the constitution of the cow and to make it a little more liable to tuberculosis, which was a danger and difficulty that had also to be fought against.

He could imagine if, with the temptation of the big cheques given for bulls, one were breeding for the Argentine, the cows would be allowed to calve at the beginning of the summer, when with the flush of grass there would be plenty of milk with which to feed the calves, and if there was more than was wanted it could be turned into cheese; but it would not make a commercial speculation without a fair amount of beasts for export. He knew there had been an attempt to put bulls at the disposal of tenant farmers and agriculturists generally, but it was very difficult to carry that out to perfection. For instance, last spring he was asked by a friend if he would let him have three pedigree heifers. He told him to go into the meadow and pick three out of a herd of twenty or twenty-five. His friend did so and took them down to Sussex. He asked what pedigree bull his friend had got to put them to, and was told that, as a matter of fact, none of the neighbours would have milking shorthorns, but they had a Sussex bull, and he was going to put them to it. Well, the result would be a cross-breed, and the thoroughbred heifers would be sacrificed and their line come to an untimely end.

He thought Mr. Mackenzie's figure of 750 gallons per annum for an average yield of milk was too high

for a pedigree shorthorn herd. He was perfectly satisfied if he got 600 gallons as an average from each cow. Of course some cows gave more at certain times in their life; but one had to take the old cows and heifers together, and the figure rather dropped down.

Again, he thought the figure given as to the value of the young stores sold in the market was rather less than one used to obtain. Before the war he estimated that he should get £1 for every month of the beast's life, and that he should have £20 or £22 for every beast short of two years old.

Mr. J. McCLARE CLARK (Member of Council) said he had great pleasure in seconding the vote of thanks to Mr. Mackenzie. Both now and after the war anything that could help a large production of food in the country was of paramount importance. What they wanted, and what Charles Collings bred for, was shorthorns, short in the leg and deep of body, fine boned, well fleshed, covered with a moderately thick hide, and carrying an abundance of "mossy" hair, and to that must be added, also, deep milkers.

He entirely agreed that the dual-purpose animal was, in most cases, the animal that was wanted. In Cumberland a type of shorthorn had been produced which met those requirements, and the type was in favour there. It was well fleshed and came early to maturity. He hoped the south country would come and buy those Cumberland shorthorns, which they were willing to sell to anyone who would pay the price. He thought Mr. Mackenzie was right. The Scotch breed of shorthorn was not suitable, except for foreign trade, and not the best for dual purposes. He thought that large owners who kept herds of shorthorns should do as Mr. Mackenzie suggested, viz., produce a dual-purpose type, so as to

provide good bulls for the farmers. In the North a good deal had already been done in that way; the stock in his district had been a good deal improved, especially the cross produced by the white shorthorn bull and the black Galloway cow, which made the finest beef in the kingdom.

The breeders recognised the necessity for good sires. The farmers in his neighbourhood were most careful in selecting, preferring white bred bulls because they were sure then of getting blue greys, which was the colour for the type of cattle that made the most money, which, after all, was the chief thing required.

With regard to the scheme for improving breeds of cattle by branding all calves got by subsidised bulls and establishing their identity by tatooing and recording the milk, to furnish data for future use, he feared if such branding and tatooing were insisted on it would deter the farmer from using the bulls, and although there were many interesting figures in the Paper, he did not think the scheme would be much help.

He thought Mr. Mackenzie considered the stock in the country worse than it really was. In the North the stock was of a much better type than Mr. Mackenzie seemed to believe. He also thought that the stock of the foreign countries mentioned was over-rated. He had not a large experience of them; but did not think they were quite so good as Mr. Mackenzie would have them believe.

He could not think that the method requiring branding and tatooing was the right way to show farmers the breeds of cattle which were best to keep. He believed more was learnt by seeing than by records, and if there were demonstration farms in various districts, where the best type of cattle might be bred and shown, the farmers would, he was sure, be very ready to follow a good

example. Let them provide bulls certainly, and encourage their use by shows of their stock, but do not let them insist on branding and the other requirements which Mr. Mackenzie had suggested.

He agreed that milk records should be kept, and that if two-fifths of the land were under plough more milk and meat could be produced, but he agreed with Mr. Horne that the 750-gallon cow was a very high standard indeed.

The figures as to cost and returns were interesting, but to enable them to criticise them they would require more detail.

The important question now was how they could produce more food-stuffs; to do so they must have some assurance as to stability of prices.

Mr. JOHN MAUGHAN (Professional Associate of Council) said, as he happened to be a member of the Live Stock Committee of Yorkshire, and also secretary of the County Agricultural Society, he was, therefore, interested in these matters. He came from within sixteen miles of where the Booths reared their herds. There were then several other herds in the neighbourhood, but after the middle of the seventies owners were not able to do as they had formerly, and the herds became dispersed. The owners gave the farmers the use of their bulls, and that had a lasting effect on the animals bred in the locality. He came from the fertile valley of Wensleydale, and in the market town of Hawes last Tuesday some 240 cows were sold in various conditions—he forgot the average, but thought the top price was £57 10s. There was a long interval when farmers had not the opportunities of getting good bulls, and the Board of Agriculture rightly stepped in and assisted them. They had 71 bulls in the county

of York—not a great number, perhaps, but they could not force them on the farmers, who were, however, using them gradually.

Mr. Mackenzie seemed to be out for milk. He did not, however, see how to get over the fact that whereas one could measure the overseas customer by hundreds of pounds, one could only measure the milk producer by tens. He saw by their committee's report for Yorkshire that in 1914 £36 apiece was given for bulls, in 1915 £39, and this year they had had to give £44. He did not think that Mr. Horne would be ready to undertake the risk of supplying them with bulls at £44 apiece.

What Mr. Mackenzie had said regarding milk records was very interesting, but it seemed to him there was such an enormous traffic in cows, people coming to Yorkshire from all parts to buy, that they could get no satisfactory result. They had, up to April, 1916, 18 herds with 207 cows, from which they were trying to get milk records. They tried to get a register of the calves from the Government bulls, and large prices were asked for the guaranteed produce. From information arising from the making of the register it seemed that comparatively few were offered for sale, and from inquiries made by purchasers from other districts very few of these calves could be obtained, all of which was very satisfactory as showing an appreciation and demand.

As to Denmark he thought the conditions were not quite similar to those in this country. The Danes, he understood, had no market of their own, and, therefore, wisely co-operated and sent their produce to this country with great benefit to themselves. He did not think, therefore, that the Dane was an example comparable altogether with the British farmer who had markets within easy reach.

Mr. S. F. EDGE (Visitor) said that as a visitor he felt it a privilege to be asked to speak. After listening to what Mr. Mackenzie had said, the first point on which he must join issue was that of breeding bulls for the Argentine. He himself went into agriculture six or eight years ago, starting with a herd of milch cows, but he found that it was impossible for a person owning his own land (his land was in Sussex—heavy weald clay) to produce milk at a profit. One difficulty was to produce it cleanly; another to keep the men, because they seemed to have a solid objection to cleanliness; and a third was the distribution of the milk. It had to go to the station one or two churns at a time, and he had come to the conclusion that it was not a proposition for anyone to put money into unless he was prepared to look after things himself and not leave it to others, because the men would neither milk the cows well nor do it cleanly. He at last said that it was no game at all for him, and decided to stop, and looked round to see what he could find to bring him the largest return. He therefore decided to try pedigree shorthorns suitable for the Argentine. He had done that for five years, and was now beginning to get over his initial expenses and to show a profit—that was to say, he was able to run an agricultural herd of cows at a profit, and he hoped if they went on next year it would be a considerable one.

The principles which they followed in breeding were usually utterly unsound, so he endeavoured to bring bulls into his district in order to try and assist the Board of Agriculture Bull Society Scheme. What was the result? He and a friend said they would pay three-quarters if the breeder would pay a quarter, but even then they were unable to form a bull society. Cowkeepers would even object to bring a cow half a mile. He came to the conclusion at last—and he

thoroughly agreed with Mr. Mackenzie and with the Board of Agriculture—that no real success would be reached until it was compulsory to have registered sires. He thought that at present they were only playing with the question in appealing to classes of men who, speaking broadly and generally—of course he knew there were individuals who were very different,—would learn only through their eyes, who were incapable of learning from reading, but who as imitative persons were excellent. It appeared to him, therefore, that there must be compulsion, and then herds could be raised in this country in any way they pleased, either for milk or for beef. There could not be a better example than the Argentine, where the weight, at two years, had actually been raised by nearly 2 cwt. per head over the whole country. That meant millions of money to the Argentine, and the same thing could be done here for milk or meat.

Mr. Mackenzie had referred to the fat-stock shows. Now he had also gone into that question. He had fed animals for fat-stock shows, and he could say, publicly, that there was no animal shown at a fat-stock show that could be sold for what it cost or anything like what it cost. That seemed to be an utterly absurd proposition, but he was supported by the careful records he had kept.

What else did he find in agriculture? He went round, and wrote to people who he thought ought to know, looked for books on the subject, and endeavoured to get someone to tell him the best animals to get, not merely the cows which looked nicest, but after search and inquiry it really came to this, that nobody seemed to know. Each man told him what he himself liked, but no one could tell him what an animal cost for food and what it would sell for afterwards. He had to find that

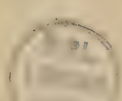
out himself by buying scales, by weighing food, and by weighing animals. It was the same with pigs as with cattle.

The ordinary man favoured the greedy animal—he said, “Look, he is a good doer, see how hungry he is,” but by watching the animal and weighing its food, one would find that the greedy animal did not necessarily get fat or put on weight; it did not make good use of its food; in fact, with less food it might actually put on more weight. One found that by the use of scales.

The Government had yet got to appreciate the facts. He could not see any reason why people living on acres of good land in this country should be allowed to feed an animal which produced less per pound of food consumed than another animal alongside it. He contended that that class of animal must be eliminated, and, in his opinion, it could only be eliminated, as Mr. Mackenzie had suggested, by keeping records and strict branding.

If left to himself the farmer would take the line of least resistance—that which gave him no cause to think; he would have to be forced out of that position by laws of a stringent character which would say that the land is needed to grow the greatest amount of food for the people of the country, and those who did not do it must get out of the business.

They had first to decide on the principle that the country required an agricultural population; and having agreed on that, they had to consider how these people could support their wives and dependents in a reasonable manner of living. Until that was done they could not expect people with brains to live on the land. He found it was always the bright boys who left the land; as a rule it was only the stupid ones who remained behind. Why? Because there was not enough money to be made on the land; that was the real trouble.



He might mention his investigations with a large herd of pigs: he ascertained by experience what they consumed per head, and finally found that he could keep them on an average of 3 lbs. per day dry food. It was done by rapid elimination or selection. If it was found an animal did not do well on that amount of food, it was taken out and put by itself to ascertain the cause—whether other animals bullied it, or if there were some other reason. It was given the best possible food and conditions, and then if it did not do well they might be sure he did not breed from it.

Of course with shorthorns it took much longer to make experiments of this kind than with poultry and pigs. It took a long time with pedigree stock to discover the best breeding bulls as well as costing a considerable sum of money, but one could sometimes tell by looking at them when young, and before they had a layer of fat on them, that they had no right to be anywhere except in the butcher's shop. One should never breed from that type, and yet people came from abroad to buy them, from the Colonies and from South Africa, these beautiful pedigree animals, for which he personally would not give two pence, as the frame under the meat was not correct.

People ought not to be allowed to breed from some of these bulls. But they were faced with the difficulty that owners said, "We have the bulls and "there are buyers for them." Mr. Mackenzie's system of tatooing would help to get over that, the animal would be seen and known, and, as a result, in twenty years' time one would hardly know this country. It could, however, only be done by compulsion and not simply by showing people how to do it. Compulsion in his opinion was the only method.

Mr. TURVILLE BROWN said he hardly felt qualified to take part in the debate as, having arrived late, he had heard only a part of the Paper. There were, however, two or three things he would like to say. The first was that in Great Britain they had the finest stock breeding ground in the world; there was nothing to touch it; it could not be matched in Denmark, Holland, or in any other place. This was the corner of the world to which the whole world had to come for its breeding stock, and his hope and belief was that through that one fact Great Britain would be made the centre of the British Empire—a help to rather than a competitor of the agriculture of the rest of the empire.

In regard to shows he thought two things were wanted: first of all, stores ought to be shown absolutely in store condition; secondly, all fat stock should be shown with the record of its feeding for the previous six months tied to its tail.

Mr. Mackenzie had spoken of the stock for foreign markets being entirely of a different character to what was wanted here. Well, looking at the thing from the particular point of view, say, of the Argentine, perhaps that was so, but there was no reason why it should be. The stock in the different districts here suited various districts all over the world. For instance, the great type was beef shorthorns, which, of course, suited the Argentine, but there were enormous tracts, particularly in our own colonies, which were suitable for dairy purposes, and he believed that it would be found that stock from our various dairy districts and dual-purpose districts would suit those parts. He would like to see everything possible done to put the districts in Great Britain into communication with similar districts in the colonies, with the idea of fostering the trade in breeding stock from here. He thanked

Mr. Mackenzie very much for his Paper, and was only sorry not to have been there to hear it all read.

Mr. MACKENZIE, replying to the debate, thanked Mr. Horne and Mr. Clark for so kindly proposing the vote of thanks.

Mr. Horne was not right in thinking that his remarks were meant to apply only to one particular breed. At Cambridge he was concerned with dairy shorthorns, but there were other excellent breeds; though he placed the dairy shorthorn first they were the poetry of the business to him. If Mr. Horne would kindly look at the Paper he would find it indicated, if it did not actually say, that 750 gallons was the average to *aim* at. He did not say it was regularly obtained, and the University records showed that with a large proportion of heifers they had not quite reached that standard; but that it was done by some breeders with dual-purpose cattle was absolutely beyond doubt.

He would refer them to records that Mr. Maughan would know very well, those of the Wensleydale Pure Milk Society, which he had had the advantage of studying. There they found a number of small men breeding carefully for generations, who had records of what was actually done. When he found himself between Cumberland and Yorkshire, represented by Mr. Clark and Mr. Maughan, he began to feel rather uneasy. In the first place, he would take off his hat to the Cumberland breeder. He had been buying cattle in Cumberland for a great many years, but he was sorry to say that he now began to see the mark of the beast there, and that beast was not the Scotch shorthorn but the Argentine shorthorn. He objected very strongly to the term "Scotch shorthorn." He would, if he might do so, give the Cumberland breeder a warning. Many of those

Scotch bulls, although their mothers might have had good bags (and their grandmothers too), did not get the same great bags. They were known as splitters, and had bags about the size of a bowler hat. He had that information from the owner of a Cumberland herd, which he had the opportunity of seeing in October, 1914.

Next, coming to Mr. Maughan, he could say that he held no brief for the Dane, but what they had done was self-evident. There was a country which had been in the depths of poverty, with land not better than their own and men perhaps not as good, yet their average production had been raised until it nearly equalled the best in Great Britain. He defied anyone who examined the statistics to deny it. They could not get away from the fact that milk was the outstanding product of Denmark. But how was it that they were able to send us so much bacon? How was it that in peace times, every day of the week, wherever there was a small port, ships left from Denmark, spreading out like a spider's web, *en route* for wherever prices were highest in this country.

In reply to his friend Mr. Edge he would say that of course, if he was studying his own pocket, the Argentine sale was obviously the thing. But the whole of his plea that evening was to try and get their clients, the great landlords of the country, not to think of the long cheque from the Argentine, but to think of their tenant farmers. That was where Mr. Edge and himself differed. He sometimes wished that he had the despotic power of which Mr. Edge spoke, but on the other hand he emphatically disagreed with his friend when he said that it was a necessity.

He had a very high regard for the British farmer. The man who had got through the last thirty years was

a man whom they should all admire, and those who had fallen in the struggle ought to be pitied and not abused. Many people forgot that it was the farmer who filled their stomachs, and that they would go hungry without his help. But he was certain of this, that no compulsion in the world would, or could, make him do much more than he did. He looked back to the time when he was himself farming, before he took up academic work, times when good men making every effort had to go to the workhouse. It behoved them to remember those things now, particularly as they would be dependent upon the farmer in the next few months to a far greater extent than they had ever been. Compulsion would be of no sort of use. He knew the farmer very well, he had worked for him and with him for the last eighteen years, and he had no belief in attempting to use compulsion on a man who knew and did his part of the business extremely well.

Turning to Mr. Brown's remarks about the Argentine and about everyone having to come here for their stock, if Mr. Brown had heard the first part of the Paper he would have known that he emphasised the fact that we were the stud farm of the world. One could go into the home markets, as he had to do a great deal, but he defied anyone to say that there was any definite and general type whatever to be found there. They would see a great many good cattle, they would see many indifferent, and they would see some bad. Now why should that be while they were the stud farm of the world? Was it not worth somebody's while to set to work to breed a class of stock useful for their own country, not for the man who wanted cheap carcasses from the Argentine, but to add to the wealth of their own country?

It was a fundamental waste not to take advantage

of the opportunities they had. They could do what was necessary to breed stock useful for their own needs, without losing their foreign customers, if they only had the sense to take advantage of their opportunity, yet they were throwing away their chance. He could not believe their present course was right. No economist in the world would convince him that that waste was a sound policy for any nation to follow.

He thanked the Meeting for the reception of his Paper, and for the vote of thanks which had been proposed.

The PRESIDENT asked that before putting the vote of thanks, which he was sure would be carried with acclamation, he might for a moment or two say a word as one representing a country quite different from any which had so far been mentioned that evening. They had heard of Scotland and England, but they had not heard a word about Ireland. Now, he readily acknowledged that in many ways the English and Scotch farmers were ahead of the Irish farmers, but there was one way in which the Irish farmers were in front. He felt that quite strongly, after listening to the discussion which had just taken place, because it was considerably more than thirty years since the Royal Dublin Society, of which he was proud to be a life member, started premium bulls.

That society had, as they all knew, many excellent shows, and the premium system began by their judges choosing bulls suitable for the different districts. Fifteen pounds was allowed to whoever bought a bull conditionally on his letting it stand to a limited number of cows at a fee of half-a-crown, and as low as one shilling for poor districts. That went on for a number of years, and had an exceedingly good effect. Then, thanks to Sir Horace Plunkett, the Department of Agriculture and

Technical Instruction was established. It was given a very substantial grant, and since that time the duty of choosing the bulls had been taken over from the Royal Dublin Society by the officials appointed by the Agricultural Department. They gave the £15 on the conditions he had mentioned. Of course those bulls were not all shorthorns, some were polled Angus, there were a good many Herefords, even he believed there were some Dexters. What were considered suitable bulls for the locality were sent down. The Department even went so far as to lend farmers a considerable portion of the purchase money, repayable in instalments. That had now been going on in Ireland for upwards of thirty years, and the improvement in the Irish cattle was quite extraordinary.

They were also doing a thing which would delight Mr. Mackenzie's heart. During the last year or two they had started taking milk records both for pedigree and non-pedigree cows. That undertaking was not quite as far advanced as that in connection with the premium bulls, but it was now being done, and he had no doubt that it would result in great advantage to the country. They would forgive his mentioning these facts, coming as he did from the adjacent island. He had listened with great interest and attention to Mr. Mackenzie's Paper. Of course one never did quite agree with all that any lecturer said, but there was one good thing about all such addresses, they made them all think, and that was a great advantage to everybody connected with agriculture. It therefore gave him the greatest possible pleasure to put the vote of thanks which he was certain would be unanimously carried.

The motion having been agreed to, the proceedings concluded.

REPOPULATION OF OUR RURAL DISTRICTS.

By THEODORE G. CHAMBERS (FELLOW).

*Read at the Ordinary General Meeting of THE SURVEYORS'
INSTITUTION, held on Monday, 15th January, 1917.*

ARTHUR L. RYDE (Vice-President) in the Chair.

The notes I am about to read originated in this way : Shortly after the issue of the Report of the Verney Committee, I wrote a short article in which I suggested that if we wanted to get more people on the land, to increase our home-grown food supply, and to remedy the evils of crowding into cities, it would be necessary to foster conditions which would, on the one hand, tend to keep people in the country and, on the other, attract people to leave the towns. I pointed out that life in the country must be made to offer definitely superior advantages to life in the towns if any permanent change in the distribution of the population is to be effected. I deprecated the idea that there must of necessity be a permanent division of the community into separate groups—country people and townspeople. I argued that a bold policy of industrial penetration of the country would be of material benefit to both agriculture and industry, and that it would be in the interests of the whole community if the State were to assist this policy by every means in its power.

Mr. Goddard asked me to read a Paper on the subject here, and, in a rash moment, I agreed to do so. Since then I have had far too little time at my disposal to deal adequately with so big a question. I have begged Mr. Goddard to allow me to retract my promise, but he has held me to it. I wish I could have given more time to the preparation of the following notes. I need not apologise for dealing with the subject as it is an intensely interesting one, but I must explain why I have been obliged to treat it by way of suggestions for a debate rather than as a detailed study. The truth is that the subject is beyond the scope of any individual Paper.

The depopulation of the rural districts is not a modern trouble to communities. It has troubled monarchs and statesmen throughout the ages. Mediæval monarchs constantly tried to stem the tide of emigration from the country by making laws to prevent it. Six times in the sixteenth and seventeenth centuries efforts were made to prevent the growth of Paris, and during the reigns of the Tudors and Stuarts the growth of towns in this country and the emigration from the rural districts were the sources of much anxiety.

Legislative prohibitions of the growth of cities are not likely to be proposed to-day, although serious attempts have been made in Germany to prevent freedom of movement with a view to retaining labour on the land. It is not, however, to any direct legislation that one looks in these days to solve the problem of the distribution of the population. The only hope lies in a careful study of the causes of distribution with a view to ascertaining whether it is possible to check or reverse the forces which tend to produce depopulation of some districts and unhealthy agglomerations in others.

Weber, whose work on the growth of cities in the nineteenth century is probably the most exhaustive treatise on the subject, sums up the situation by saying, "When the rural population has once become sufficiently numerous to carry on cultivation in the most profitable way, all further growth becomes disadvantageous," and Dr. Longstaff, in Palgrave's *Dictionary of Political Economy*, says: "No effort will succeed in attaching to the soil a greater number of labourers than is absolutely required to produce sufficient supplies of food under the easiest conditions attainable."

These views are sound if one considers occupation in the country as limited to the production of food by certain fixed and stereotyped methods. The limit to the possible population is soon reached, and if the natural increase in the population is not balanced by emigration disadvantageous conditions must result. Depopulation is not necessarily an evil. Human beings, if the means of movement are open to them, will naturally tend to go where they can most easily subsist and where they can most easily obtain those things to which they attach value. Ireland is a striking example of this. In spite of repeated famines during the first half of the nineteenth century, the population increased until, in 1841, it numbered 8,196,597. These people lived in a condition of extreme poverty, miserably clothed, fed and housed. Semi-starvation was their normal lot. The failure of the potato crops for three successive years, 1845-47, produced a famine of unusual severity, during which from 200,000 to 300,000 people perished from fever and starvation. Since 1847 the population has steadily diminished through emigration, and in 1911 had shrunk to 4,390,219. On the other hand the wealth of the country had enormously increased, and the present

population is living in a state of comfort and material prosperity which was quite unknown in the days when a large population was attempting to subsist with altogether inadequate means.

The Scottish "Congested Districts Board" is in itself a suggestion that an increase of population with insufficient means of finding subsistence is a worse evil than depopulation. In fact, one of the directions in which the community as a whole has made successful efforts to ameliorate the lot of the few has lain in the provision of machinery to facilitate the emigration of people from districts where the means of subsistence are difficult to obtain to other districts where there are abundant opportunities for productive effort.

The real danger to the body politic lies not so much in the mere depopulation of particular areas, as it does in the separation of the inhabitants of a given country into two camps with completely different and often hostile economic conceptions. The danger is accentuated when the promotion of increased means of subsistence in the country districts is neglected, and the people herd into the towns to find a livelihood which cannot be got in the country. It is bad for the State as a whole when this separation of the people into two classes, industrial and agricultural, is carried to an extent which places the predominant political power in the hands of the industrial population. The interests of the country as a whole are lost sight of through the failure of the majority to realise the paramount advantages to the State to be derived from a proper consideration of its agricultural interests and the maintenance of the home-grown food supplies.

The failure to provide the means of subsistence in the country for an expanding population is also per-

manently injurious to the country people, in that the large towns and the colonies attract the most enterprising and the most gifted. Those with most intelligence and push are the first to realise the advantages which emigration offers, and it is those with most courage who venture out to try their luck. This process of selection tends to the deterioration of the home stock.

A study of the movements and comparative growth of the rural populations in this country during the latter part of the nineteenth century, and particularly of the numerical relation of groups of the population engaged respectively in occupations which attach them to industrial or rural interests, is valuable. But I would at this point put in a word of warning with regard to the danger of attaching too much importance to any statistics based on the population in administrative areas, technically known as urban and rural districts. Figures based solely on statistics derived from the Census tables are very misleading. Many so-called urban districts contain considerable areas of agricultural land, while several nominally rural districts have pronounced urban patches. We are still somewhat in slavery to ancient tradition in this matter. There was a time when cities were clearly and definitely bounded by walls and fortifications. Then towns were towns and the country was the country. The one stood for commerce and industry, the other for agriculture and agriculture only; but the mediæval distinction has now lost its significance, and the old nomenclature is no longer trustworthy. It is, however, often necessary to use figures derived from the Census Returns, but this word of caution must always be borne in mind. In some respects our occupation statistics give a much

better guide to the conditions of the country as a whole, and offer a sounder basis for the consideration of the general problems of the distribution of the population. While keeping this warning in mind, it is worth while to consider a few figures which provide a rough test of the relative distribution of the population in this country.

The extent and rapidity of the movement in the past hundred years has been remarkable. In the year 1851 there were in 580 towns in England and Wales a population of just under 9,000,000. The rural population—and it was then even more of an agricultural population than is the rural population to-day—was almost exactly the same figure. Even at this date the economic interests of the townspeople and rural dwellers were often incompatible, but the equal distribution of the population did not give a preponderance of power to the one or the other. Even with the rapid growth of the urban population the political power of the landed classes enabled the claims of the rural economic interests to be upheld for some years as against the growing weight of the commercial and industrial economic interests.

But by the year 1911 the growth of the urban population made the country predominantly urban. In that year 78 per cent. of the population of England and Wales, or over 28,000,000 people, were living under urban conditions, while only 22 per cent., or under 8,000,000 people, were living under rural conditions. As regards their economic interests, the disparity was even greater than these figures indicate.

Of the 8,000,000 people living under rural conditions, that is to say, in what are technically rural districts, less than 1,000,000 males aged ten years and upwards were

engaged in agriculture, while about 1,250,000 were engaged in industrial pursuits and in mines and quarries. The small numerical strength of the agricultural interest can be appreciated when it is stated that out of a population of 36,000,000 only 1,276,400, or less than one-twenty-fifth, were engaged in agricultural pursuits, including a quarter of a million gardeners, nurserymen, and domestic gardeners, whose interests are not identical with the interests of agriculture.

It is scarcely surprising that the interests of rural economy have been made subservient to commercial and industrial interests.

But it has not only been in the direction of detriment to the agricultural interests that harm has been done to the body politic by this rapid increase of the population under the industrial *régime*. The growth of our towns and cities took place at a date prior to reasonable conceptions of social duties and obligations. Our towns came into existence very rapidly and in a haphazard way. With certain notable exceptions, little thought was given to the science of city building. The speed of the growth of our cities was alone sufficient to account for what often appears to us to-day to have been almost criminal folly on the part of the powers of the nineteenth century. When unfavourable comparisons are drawn between English towns and those which have grown up in other countries during the last thirty years, it must always be remembered that our cities sprang into existence almost three-quarters of a century before Continental countries began to move in the same direction. Our period of rapid growth of cities was going on throughout the whole of the nineteenth century. Between 1811 and 1851 it was particularly rapid. The ideas and conceptions of the first half of

the nineteenth century were extremely primitive. A delay of more than half a century gave every advantage to those who followed. They were able to learn much from our mistakes. Nevertheless, the conditions which our early mistakes in city building have given us as a legacy from the early nineteenth century have been a serious detriment to the national welfare. The extraordinary density of the population in certain districts, the congregation of masses of people living in extreme poverty and cut off almost entirely from any social contact with those who are better off than themselves, have been productive of much that is deplorable. It is no exaggeration to say that we have to-day a proportion of our population existing in conditions which are a serious handicap in the racial struggle for existence.

Overcrowding is a relative matter, and there may be differences of opinion as to what constitutes overcrowding, and to what extent technical overcrowding is in itself injurious. But most people will agree that the condition of living more than two persons per room, which has been adopted as the official standard of overcrowding, is an indication of other conditions which will probably be morally and physically detrimental. That there should still be 3,139,472 persons, or 9·1 per cent. of our population, living in these conditions, is a sorry commentary on our civilisation. That this condition is often coincident with the collection of masses of people in limited areas is only what one would expect. This is borne out by official figures, which show that while the average population living more than two in a room in England and Wales is only 9·1 per cent. of the population, it exceeds 10 per cent. in 31 of our cities over 50,000 inhabitants, it exceeds 15 per cent. in 12 of them, and in 5 cities it actually exceeds 30 per cent.

Although vital statistics do not prove that the modern well-ordered city is detrimental to health, it can certainly be said that the concentration of population in the circumstances which existed in the towns of the past produced an enormous drain on our vitality. Excessive urban mortality is mainly due to lack of pure air, water, and sunlight, together with uncleanly habits of life. But, as Weber justly says, "There is no inherent
"and eternal reason why men should die faster in large
"communities than in small hamlets provided they are
"not too ignorant, too stupid, or too selfishly individualistic to co-operate in the securing of common
"benefits."

The twin evils of the present position incidental to the manner in which our population has become distributed during the past sixty years have come home to the nation during the present crisis. They may be described in the words contained in the Report of the Verney Committee:—

"One of the most important lessons learnt from the war is the extent to which the defensive power of a country is strengthened by its capacity to produce food for its inhabitants, and the developments of modern warfare have emphasised the danger of an undue dependence on foreign sources of food supply. There is also general agreement that on economic grounds it is a matter of the greatest importance to increase the production of food in this country, and so reduce the amount which has to be imported from abroad.

"Apart from the economic reasons for increasing the rural population, there is, we think, a general consensus of opinion that it is also most desirable to do this on social grounds. The stability and physical strength of a nation depend largely on those classes who have either been born or brought up in the country or have had the advantage of country life. It is certain

that the physique of those portions of our nation who live in crowded streets rapidly deteriorates, and would deteriorate still further if they were not to some extent reinforced by men from the country districts. The recruiting returns show a much larger proportion of men rejected for physical reasons in the large towns than in the country districts. If, therefore, we desire a strong and healthy race, we must encourage as large a proportion of our people as possible to live on the land. We fear that the growing tendency to move to large centres of population, a tendency which is not confined to this country, is likely to be more and more stimulated by the development of town attractions and facilities of locomotion, and can only be counteracted by a revival of agriculture, together with an improvement in the existing conditions of rural life."

The Committee are probably right in assuming that there will be a general acquiescence in the views which they express. The urban worker has undoubtedly been brought to a realisation of the peril of too great dependence on foreign food supplies.

The National Conference on War and Food Prices, convened by the Executive Committee of the Labour Party in December last, passed the following, among other, resolutions :—

"No policy will give public confidence unless it includes . . . the organisation and supervision of production, so as to use home resources to the utmost, especially as regards agriculture, which, in the opinion of the Conference, can be dealt with most effectively by fixing a guaranteed price to the producer on condition that satisfactory minimum rates of wages are also paid."

We may safely assume, therefore, that all classes in the community will now agree that it is desirable (1) to attract a larger population to the land, and (2) to increase

the production of food in this country, and so to reduce the amount which has to be imported from abroad, (3) to take such steps as may put an end to the detrimental effect of certain urban conditions on the stability and physical strength of the nation. The difficulty is to construct a policy broad enough and big enough to effect such profound changes as are implied in these three statements. If we really desire to effect a permanent and far-reaching change in our national economy, we shall have to adopt a very broad policy. It is questionable whether it would be either desirable or satisfactory to use direct legislative means. The causes are fundamental. Artificial piecemeal methods, such as planting the people in the country in settlements, fostering uneconomic village industries, or trying to improve the land laws, are likely to prove quack remedies. What we have got to do is to face the larger facts of the case, and probe into the forces which at present tend to depopulate the rural districts and to crowd the urban areas. We have to see whether any forces can be checked or removed. We have to consider whether we can stimulate counter-forces which tend to produce the diffusion of the population over a wider area. Dr. Longstaff, in Palgrave's *Dictionary of Political Economy*, sums up his notes on the subject by saying :—

“The modern man prefers to live in an urban or suburban district ; improved means of communication enable him to accomplish the object of his desires, and no effort will prevent him from doing so.”

I quote this fatalistic conclusion as being typical of the view most generally held. It appears to assume that there is a necessary permanent division of the community into urban and rural, and to base the assumption on two

main premises, first, that life in the country, or life lived under rural conditions, is only for those connected with the supply of food ; and secondly, that the various factors which attract men and women to towns are bound to continue. It seems to me that society has it in its power, if it chooses to exert itself in certain directions, to modify the present conditions, and to produce other conditions which will cause men other than agricultural workers to remain in the rural districts for preference, and even to attract people away from the towns into the country.

We have to notice not only the forces which may be said to repel people from the rural districts, but also the forces which attract them to the towns. It is impossible to deal with these separately. People are repelled from the country because they fail to find certain things which they value, or believe they value, and which they either know or fancy the towns will provide. Probably the expression which summarises the matter in the minds of the greater number is the term "wages."

The question of the real wage, that is to say, the total receipts in cash or in kind as payment for work done, having due regard to the cost of living where the wage is earned, is a complicated problem. It will be agreed that if all factors are taken into account the rural worker may often have an advantage over the town worker, but it must also be admitted that appearances are often against this view. One step that can be taken with advantage, and which requires no legislative sanction, is to make the earnings of the rural worker as apparent to him as are the wages of the town worker. But this is not all that is necessary.

It is an economic commonplace that the wages of a producer cannot exceed the market price of his pro-

duction. Whatever legislation may attempt, or charity may desire, this is an absolute law. For any machinery of production to survive and to increase, the produce must suffice to pay, first, the interest upon the capital involved, or capital will migrate, secondly, the remuneration of the manager for his enterprise, or he will go to some other place. The balance is available for the payment of the wages of the labourer. These are hard facts, but no amount of twisting and turning them about will alter them. It is the profit on food-growing that determines the wages of the agricultural labourer, and also largely determines the numbers employed. The only effective method of raising the wages of agricultural workers, and at the same time increasing their numbers, is to raise the value of the worker's production, and in this direction we might produce a catalogue of constructive proposals.

In the very front I would place credit—a term which includes a number of questions of vital moment. There must be an end to attacks on the security of capital invested in the preparation of land, and the provision of buildings and equipment for agricultural purposes. Free capital is one of the most mobile of modern economic instruments, and credit based on capital is most sensitive. It is easily repelled, and once frightened out of certain channels it is not readily enticed back again. It is very impersonal and intangible. We ought to devise more effective machinery for the mobilisation of credit—credit for the small people as well as for the big. The more intensive the cultivation, the more the agriculturist's enterprise involves transactions in buying and selling spread over considerable periods, the more essential it is that he should obtain, easily and readily, reasonable credit facilities to

enable him to make the best use of his capital. Other countries have set an example in the matter of agricultural credit facilities which has not been sufficiently followed in this country.

Next in order of importance I would place co-operation—co-operation in purchase no less than co-operation in sale. In every enterprise purchasing has a great effect upon profit, although in too many cases it is to the selling end of the business that attention is mainly devoted. But in both buying and selling, co-operation will do much to transfer to the producer some of the profits of the middleman.

These questions bring one naturally to consider the general effect of education on the situation. I refer not only to specific agricultural education in secondary schools and agricultural colleges which has so greatly improved during the last decade, but to the desirability of some modification of the education given in elementary schools. It is probable that the type of teaching given during the last twenty or thirty years has increased the tendency to migrate to towns. The great influence of the schoolmaster over the young makes this one of the matters to which attention ought to be given.

In the direction of assistance which the State might afford the agricultural producer without detriment to the economy of the town dweller, I would place improved means of communication. I do not propose to deal with the question of railway transport in detail, but I would point out that in the unification of the management of the railways, under whatever system it may take place, there is great hope for assistance to agriculturists. While investigations and enquiries may have shown that there is no illegal preference given to foreign produce, and while business justification may have been

shown for adverse rates to home growers, the general conclusion must be drawn that individual companies are more or less bound by their individual problems. They have the interests of the shareholders to consider. The system of uniform railway charges in certain geographical zones, which might be of assistance to the home producer, would certainly be more feasible under unification.

The effect of this system must tend to eliminate the factor of transportation facilities from the advantages or disadvantages of particular localities for production. The zone tariff system has, I believe, been successfully developed in Hungary; but it has to be borne in mind that such a system of uniform rates would have less effect on a sea-girt territory like the British Isles than it would have in an inland state. The bearing of an extended coast line on the problem can be at once grasped when we realise that one-fifth of the population of England and Wales is situated at eight of our chief ports of entry, and that, however we may manipulate our inland transport rates, seaborne produce can always reach these great centres of population by water. Nevertheless, the general decentralising effect of the zone tariff system cannot be overlooked in its bearing on the agricultural problem. It would inevitably tend to distribute the population over a wider area, and would take the markets for produce nearer to the producer. Unification might also lead to a more enlightened policy as regards canal and road transport. In the direction of the fuller control of the roads by the State and in the extension of motor services there lies much room for constructive policy in aid of agriculture.

There can be no doubt that the extension of industrial activity in the rural districts would have a material effect on the total home-grown food supply. The com-

bination of industrial and agricultural activity within the family group, which is feasible in such circumstances, will be altogether beneficial. The family can obtain the advantages of the higher wages which can be earned in industrial production, together with the opportunity to cultivate a sufficient amount of land to provide itself with a portion of its total consumption of food-stuffs. Even when manufacturing and agricultural operations are not combined in the same family beneficial results will be obtained. Where the population is spread out into the country by reason of industrial development in rural districts, small holdings for *petite culture* can be rendered profitable. Each industrial centre becomes a market for the sale of a certain amount of produce. The producer of perishable produce gains by having his market thus brought nearer to him. The cost of transport to the consumer is reduced to a minimum. So long as communities are concentrated in cities the foreigner often has the advantage of the home producer. The steam railway method of transport, with its system of main lines from the ports to the great industrial towns, favours the through carriage of perishable goods in bulk from abroad direct to the consumer.

While the people are collected in small areas, it will often be cheaper to feed the people with foreign produce. The whole position is reversed if we take the market to the producer by dispersing the population over a wider area. It is in the direction of successful *petite culture* that we have mainly to look for opportunities for the small capitalist to earn a living on the land. It is probable that, having regard to the advance of science, increased mobility, and the opening up of new countries for corn growing and stock raising, the home agriculturist will remain in future in a position of economic

disadvantage as a producer of the staple necessities of life—wheat and meat—except in the most favourable circumstances. We cannot get away from the fact that this country must remain dependent to some extent upon supplies from other parts of the empire. The empire can supply us with certain agricultural commodities more easily than we can supply them ourselves, but the higher wages which have been rendered almost universal by our industrial development have extended the requirements of the people to a very wide range of commodities other than meat and bread. The consumption of fruit, vegetables, poultry, eggs, butter, cheese, and honey has increased enormously in the last fifty years, but this demand might be further increased if the consumer could be brought more directly in touch with the producer without the present large additional cost of handling transport by numerous middlemen.

The dispersal of the population, the intermingling of industrial and rural life, also disposes of the principal social obstacles to land settlement, the fear of isolation, and the absence of those social amenities which are to be found in towns. The pleasures and entertainments and the social life which is enjoyed in the cities would be available for all classes of the people, agricultural as well as industrial, and one of the chief barriers to the settlement of men and women on the land would be removed.

Modern industrial methods are certain to lead to more intense standardisation and to an ever-increasing monotony in many of the factory operations upon which our operatives will be engaged. The only safeguard to the danger involved in this obliteration of initiative from the wage-earning task lies in more individualistic occupation in leisure hours, and in no direction can this

be found more easily than in some form of agricultural pursuit.

We may now consider what steps can be taken to bring about this industrial penetration of the rural districts. One of the most potent influences on the depopulation of the rural districts has been the centralisation of manufactures, with which the direct attraction of the city is so intimately connected. The industrial capitalist has sought the town for many definite economic reasons. The wage-earner has been attracted to the towns by the higher wages paid by the industrial capitalist and by the interests, amusements, and educational facilities which he undoubtedly finds in the towns. Wherever capital goes there is a tendency for labour to follow. If industrial capitalists can be drawn out of the town into the country, wage-earners will soon go after them, and will soon create their own interests, amusements, and educational facilities.

In the garden city conception there lay much wisdom, and it has been unfortunate that the garden city movement has so largely developed into little more than the construction of garden suburbs. The motive of the initiators of the garden city was rather the industrial penetration of the rural districts than the mere improvement of the life of the town-dweller by taking him out of the city to sleep, beneficial as this is in itself. The policy has only been partially successful. The Letchworth Estate was purchased in 1904, and may be said to have reached in twelve years a tolerably secure position, but its rate of growth has been extremely slow compared with that of towns which sprang up by means of natural causes. The history of Letchworth proves the extreme difficulty of endeavouring to force human movements in the presence of adverse economic factors.

The arguments in favour of carrying the town boldly into the country can be easily stated and will be readily accepted, but with the advantages there will be certain disadvantages, and it will be convenient to consider these together.

The manufacturer gets the advantage of cheap land, enabling him to erect roomy convenient factories with one storey and a good light. Everything is on one floor and under one roof. The cost of building is less, and the cost of upkeep is less. A high ground rent tends to buildings of many floors, and high buildings entail increased haulage. In many trades—for example, printing—the clear air and absence of dust make for improvement in workmanship.

Again, in the direction of lower rates the manufacturer often finds an economic advantage in the country. The rating question is closely connected with our problem. It will be generally admitted that the rural districts often bear burdens which should be borne by the nation as a whole. One need not deal here with the obvious objections which exist to any policy of suddenly lifting any part of the existing burden of rates. Difficult questions of incidence of rating and the effects on land values are involved; but it may, I think, be suggested that many of these objections could be removed by leaving unaltered the sum of the burden while giving attention to the items of expenditure. If the State were to make larger grants in aid of rates in respect of such national services as education, poor law, and the maintenance of roads, more money would be available for expenditure for the particular benefit of the localities, such as increased telephone facilities, the improvement of local transport service, and the like.

The removal of the factory from the town would, in

many cases, also tend to provide the manufacturer with a higher class of labour. The conditions under which the operatives would live would improve their physique and increase their power of production. The operatives could be not only well housed, but they would live under conditions which would make for their greater happiness and well-being all round. Generally speaking, manufacturers requiring the best type of labour would gain, but all manufacturers would not find an advantage. In a great city a certain type of employer is able to draw upon casual labour. Even those who have provided garden dwellings for some of their labourers seem to be compelled to draw a considerable amount of cheap female labour for certain operations from neighbouring congested towns and cities.

Cheap transport is more vital to many industries than is cheap land. The ultimate deciding factor is profit. It is no use offering manufacturers cheap land and a better type of labour if other elements which they have to consider outweigh these. All that has been said on the question of the unification of railway management, road and canal transport facilities, has an important bearing on the question of the industrial penetration of the rural districts. Generally speaking, it may be stated that no movement of the kind can be produced unless the capitalist is convinced that it will pay him to set up his enterprise in the country. He cannot be forced to go where he thinks he will lose his money. As we have said, the worker will tend to follow if capital leads the way. But we must also do something to make the worker desire to leave the towns and to keep him in the country.

From the point of view of the operative there are arguments for and against the garden city. On the face

of it there are certain material advantages. Life as a whole may be more desirable in theory. His housing conditions may be excellent. He can combine a certain amount of food growing with his ordinary avocations. It must, however, be remembered that the worker in many trades is not very keen on turning out into his garden after his ordinary day's work is done, however much of an economic advantage it may offer him from the point of view of the lecture-room. Unless the new city is designed on a certain scale with schools and amenities in excess of its early requirements, the worker will have reasonable fear for the education of his children and for his own and his wife's amusements and interests. The average town worker is not particularly keen on country life, and the very poor cling to their own streets and would not exchange their surroundings for any of the advantages of the garden city.

It is probable also that the worker feels a greater sense of liberty in the large city. He and his family have a greater choice of occupation. If he moves into a new town with less range of employment he runs a greater risk of unemployment. Single industry towns are always liable to become bad places for the operative in the event of economic difficulty affecting that industry. The greater the number of industries the less chance there is of widespread unemployment. Again, the garden city under the control of an employer is not an altogether ideal place from the point of view of the operative. Nevertheless, as we have hinted, the question of the wishes and feelings of the operative is a small part of the problem. If the means of livelihood is offered in the new city the operative will go there, and although he may grumble, he will stay there as long as he can earn his living. There will be distinct racial benefits

from the improved conditions, but the conclusion we have to accept is that the urban exodus can be obtained only by inducing the capitalist producer to put down his capital in the country.

It may be interesting to consider whether the State could assist the movement to some extent by making employers of labour responsible for the adequate housing of those they employ. In this country 250,000 males and 50,000 females are employed by the national and local governments, 397,000 are employed on the railways, and over 1,000,000 in mines and quarries. Neither the State, nor the local authorities, nor the industrial capitalists have in the past shouldered their responsibilities in the matter of housing. The Central Government, the local authorities, and the railway companies should, in my opinion, be made responsible for housing their own servants. The great capitalist corporations of the future, with their large resources, their ability to purchase large blocks of land at a cheap rate, could easily lay out and build on a large scale and could house their operatives in a manner immeasurably superior to those existing, and such a course of action would have a direct effect upon the power of production of their employees, and be beneficial to the community as a whole. The question is admittedly a difficult one. Unless great care were taken there would be serious hostility on the part of labour.

In spite of all the difficulties of the question there is to-day a sufficient movement in the direction of the industrial exodus from cities to warrant a belief that the tendency is likely to continue and to increase.

The tendency to decentralisation of industry has certainly become marked in the United States. Many manufacturers have realised the disadvantages of city

conditions. They have moved to avoid the burden of high rents and high rates and the hindrances to rapid expansion which exist in the congested conditions of the city, where often expansion of any kind is impossible. Improvements in transportation, which enable the manufacturer to be at some distance from his markets of purchase or sale, and the telephone and rapid post system, which enables the policy of a business to be efficiently directed from a mere office in the city, have all aided the movement.

"In recent years," said Weber, "the decentralising movement has taken a still more favourable turn, largely as a result of continued improvements in transportation methods and a more enlightened policy on the part of railway managers, who have learnt that the factor of distance is of minor importance in the expense account as compared with the additions to the revenue that result from a judicious encouragement of industries in small cities along their lines."

To-day we see the same movement growing in this country. Every railway company is now advertising cheap sites for factories bordering their systems. This policy would probably have begun much earlier if we had permitted the railway companies to hold belts of surplus lands.

Much might be done to assist movement by providing a clearing-house for information as to the advantages of different districts from a commercial point of view. Tabulated statements might be prepared by the Board of Trade giving for each district information as to cost of land, rates, means of communication, railway rates, proximity of coal and iron and the raw materials, and other data, to enable manufacturers to judge of the

desirability of moving their works. Greater financial assistance might be given to public utility societies instituted for the provision of works of public utility, such as housing schemes, transport facilities, and all that class of enterprise which is intended for group benefit.

The vital problem of the near future is to discover the happy mean between State assistance and State control. There are to-day four classes upon whom the lives of the people may be said to depend: the Central Government, the local authorities, the individual capitalist, and groups of the people themselves, and the future welfare of the mass of the citizens will, to a great extent, be determined by the division of responsibility between these four. The part of the State appears to me to be that of delegating to the other three the functions which they are best adapted to perform for the general welfare.

In the direction of increased power and responsibility in the hands of the local authorities there is room for much careful thought. The local authorities throughout the country have, generally speaking, risen to the occasion during the war. Burden after burden has been thrust upon them by the Central Government. They have had to undertake immense responsibilities and most onerous duties, and they have proved up to the hilt that the policy of boldly delegating responsibility breeds the power to shoulder such responsibility. If, after the war, individual citizens of leisure and education will grasp a sense of their duties to the State and will enter the field of municipal activity, placing their brains and powers at the service of their localities, serving as members of councils and taking an active share in local administration, it will have a most beneficial effect

on the well-being of the State. There are functions which the local authorities possess to-day, but which are rarely used, which would have a great influence on the lives of the people.

The welfare of the new town of the future will depend to a great extent on enlightened city management. One of the directions in which one may hope to see an improvement is that of raising the status of the permanent city official. Town management in the future should be one of the great professions, requiring a training in economics, civic welfare, town planning, and social work of every description. The position of town manager, and that of assistants in the town management, should be coveted by men of high attainments and great skill. By this means the whole tone of local self-government would be raised. The war has certainly imbued the country with a higher conception of office and duty, and the unrecognised strenuous civic work that has been done throughout all the municipalities of the country during the war cannot possibly be exaggerated. A new spirit has entered into civic life, and no one who has come into close contact with the cities and towns of this country during the last year or two can fail to have felt that an atmosphere has been created that must prove to be permanently beneficial.

The responsibilities of the industrial capitalists after the war will be onerous. Upon them to a large extent rests the power to maintain the industrial peace, but this aspect of the question is rather outside the range of this enquiry.

But I believe it is in the direction of delegating to the fourth class, the individual groups in the community, greater power and responsibilities that there lies the greatest hope for our towns in the future. The policy

of trusting the people to manage their own affairs can and should be extended wherever it is possible to do so.

If the policy of housing by employers of labour is adopted, it is essential that labour should have a full share in the responsibility of town management. Such communities must be really self-governing units, not controlled by the capitalist, by the municipality, or by the Central Government.

We are, on the whole, a people with remarkable powers of getting things done when we know exactly what we want. In this case we can reduce the *desiderata* to a simple formula. We want to increase the sum total of our home-grown food supply. We want a larger proportion of our population to be living under better physical conditions. Is it in our power by any possible courses of action to help towards this end? We know that artificial methods are useless, and that if we desire a permanent change of conditions we must work by the gradual modification of the causes which have led to the evils we deplore. Are there any practical steps that can be taken to reverse the tendencies to agglomeration—to attract the people out into healthy surroundings, and to keep them there? If we can do this we shall have done something towards securing both our aims. It must certainly have the effect of increasing our food supplies, and will mitigate the evils which have hitherto been inseparable from industrialism.

The war has given Western Europe an opportunity of social reconstruction which no other circumstance could have done. We are in a state of flux, and the ultimate consolidation on sound lines conducive to the welfare of the race lies to-day in our own hands. It depends upon the extent to which we as individuals realise this and are prepared to act that the future of the country depends.

Mr. ANDREW YOUNG (Vice-President), rising to propose the vote of thanks, remarked that in these times the preparation of such a Paper by a busy man was a sacrifice, more especially when it was remembered that, with so many of their younger men away on service, the audience would be a small one. It was not, however, only to the few who were gathered there that evening that it would go, but to a much larger number outside, and especially the country Members, who await with great interest their copy of the *Transactions*.

Many years ago an architect, with a reputation for making and supporting extravagant claims for property acquired under compulsory powers, read a Paper at the Auctioneers' Institute on the way to prepare such claims. On that occasion he joined in the discussion, and it was a somewhat lively evening. At the close a barrister, still practising, said that he had been wondering whether he had been present at a debating society instead of a professional institute. For the most part the Papers read at these Meetings were by experts, and Members came to learn rather than to criticise. It was possible that were the evenings somewhat more lively a larger attendance might be attracted.

The subject under consideration that evening was more economic than technical, closely associated with the land and housing problems, affording an opportunity for more discussion than usual. Their attention had been called to the evils of depopulation; their memories had been refreshed by what they had heard; and their attention had also been called to what was taking place in the present crisis. There was much in the Paper with which he fully agreed, more especially the suggested industrial penetration of rural districts. On their rail-

way journeys they realised that this was taking place, and the pace was increasing—printing works, factories for electrical and telephone equipment, mineral waters, &c., and many others were springing up at the railway side. But it was only on sites near railway or water transport that land could be found suitable for industrial purposes. This left the larger rural areas to be considered, to which he would direct his remarks. They would all agree that it was desirable to bring about the change set forth in the Paper, and they had to consider the methods for doing this.

He agreed with Mr. Chambers that the subject was beyond the scope of any individual Paper. Often he had found that those to whom he had spoken on matters affecting the question before them were much opposed to what they called grandmotherly legislation, but now it was found that they were approving of many proposals in Parliament which seemed to be Socialistic, or anyhow had the appearance of State Socialism. On p. 66 of the Paper was quoted the resolution of the National Conference on War and Food Prices, convened by the Executive Committee of the Labour Party in December last. It read: “ No policy will give public confidence unless it includes, “ &c., the organisation and supervision of production, “ so as to use home resources to the utmost, especially as “ regards agriculture, which, in the opinion of the Con- “ ference, can be dealt with most effectively by fixing a “ guaranteed price to the producer *on condition that* “ *satisfactory minimum rates of wages are also paid.*” The sting there was in the tail, but Mr. Chambers made no reference to it.

He had had forty years of strenuous life, and during that period he always sought to take good long holidays, mostly spent in the rural districts in the north of Scotland

and on the Continent, especially in Switzerland. This had brought him into close contact with farmers in Scotland and peasant farmers abroad. The farms were of a size which could be worked by the farmer and his family, with, in some cases, the assistance of one man or a serving maid. By skill, industry, and thrift they were prosperous and content. The farmers joined in purchasing reaping and other machinery, and also joined hands at harvest and hay-making. They had their own enjoyments; to be with them in their gatherings and dances was quite an experience. At the time of King Edward's Coronation he gave the farmer with whom they stayed when in the north a trip to London; he enjoyed it, but went back contented, having no desire to see again the larger world. These men were really cultivating the land, and making a living in contentment, and it should be the object to bring this contented spirit into the larger areas. In driving along some of the glens in the north he had found ruins of farms and buildings that had been attached to them, and he had been told that the land had been taken out of cultivation, and devoted to an extension of the deer forests. He was not suggesting that there was anything wrong in that, but to-day the great complaint was that the country was not producing as much as it ought for our own food supply. Pressure was being brought in the endeavour to increase those supplies. He had been wondering whether land used as he had described would be brought again into cultivation.

He did not suggest that those who owned land had not a perfect right to use it as they pleased, but he knew from his conversations with those men in the north that they were only too sorry to leave the land they and their fathers had tilled for so many years. In Switzer-

land he had had some experience of how with hard work and thrift the farmers made a living, enjoying bright and happy lives, and, in many cases, saving money.

Petite culture had been referred to, and in that connection he would remind them of what occurred after the Franco-Prussian War, when it had been stated the peasant farmers found much of the 200 millions war indemnity. That looked as if the people on the land could be happy, prosperous, and contented. Nothing appealed to him more than the English rural landscape, and he was conscious that with smaller farms they might lose the large sweeping fields of golden corn and in other ways take from the grandeur of the scenery, but it seemed possible that larger farms than those he had referred to might be worked with a good result. At the present time in Buckinghamshire he came in contact with a farmer who worked his own farm, having recently purchased it out of the profits made on a farm which he had rented. The farm was not a small one, and it had as good an appearance as those of the adjoining owners.

They all approved of the effort now being made to increase our food supplies, and he agreed with Mr. Chambers that artificial means were useless. There was a suggestion of fixing a minimum price for corn to induce farmers to grow more, but the increased production per acre was a more far-reaching question, and although the increase in the quantity of corn raised might exceed the expectations of the most sanguine, a very large portion of our supplies would still have to come from abroad. Britain still ruled the waves; and he looked again for the cheap loaf for the many rather than a dear loaf for the many, of larger profits for the farmer, and

an increased wage for the labourers. Mr. Chambers had told them that only 22 per cent. of the population were in rural districts, and therefore, in legislating for those who were the owners or workers of the land, they had to consider the larger percentage of the population. On the lines of free trade the country was likely to grow rich again. They had been surprised themselves, and they had surprised other nations, by the riches of this country.

The labouring classes had been educated by what was now being done, and they were out for a larger share in the distribution of wealth. Great changes were before them, and "Land for the People" would be the cry again from those who would till the soil. His opinion as to the problem of the repopulation of our rural districts was, first, that either they would have to have smaller farms or more intensive cultivation on the larger farms, and the labourer should have a larger wage to attract him to the land.

He regretted that in early life he had not studied political economy. Without a knowledge of that science it was difficult to discuss this subject: in connection with it he felt he was only a student; he had still an open mind. Some of the Members he saw present had not only knowledge of the subject, but had also experience in the working of farms, and he waited with interest to hear their remarks on the Paper.

In closing he would again ask them to accord Mr. Chambers a most hearty vote of thanks.

MR. FRANK W. HUNT (Fellow) said it was a privilege to second the vote of thanks to the author of the interesting Paper they had just listened to. As

Mr. Young had said, their thanks were especially due to Mr. Chambers for having, at the present time, undertaken the preparation of the Paper. It was good, both for The Institution and for a much wider circle, to have such a subject submitted to them, as it was one that must be in the minds of many at the present time. Our whole notions of the order of things were in the melting-pot. The fact of men fighting side by side in the trenches had caused a different outlook between classes, one that no one in that room would have dreamed they would have seen in 1916-17, or for many years hence.

One advantage of such a Paper was that it helped to put in perspective some of the most serious problems which the nation had to consider; it was one of the problems which must be dealt with directly peace was signed, and one in which, unless serious forethought was given to it, mistakes might be made which would take generations to remedy. The Paper naturally divided into two parts; first, the retention of the present agricultural population on the land, and second, the attraction of further persons to agriculture. It was clearly shown that the two elements which were most potent in repelling people from the land and driving them to towns were, on the one hand, wages, and, on the other, the lack of attractiveness in the rural life. As to wages, he saw the author considered that wages would have to be increased, though it was not so long ago that Members, not usually practising on the agricultural side, had been spoken of as "Spring Gardens farmers" when they suggested that, even in this best of all possible rural worlds, that problem would need attention. But he now saw it stated that wages, or the nominal wages as they understood them, had some effect in transferring the

population from rural to urban conditions. No doubt one might explain quite well to a man living in the country that his wages were really far more than he was likely to obtain if he shifted to a town; but one did not realise that at the bottom it was the lack of attractiveness in rural conditions which repelled so many from the country and forced them into towns.

With regard to what the author so well described as "the industrial penetration of rural districts," he thought there could be no question at all that the conditions, as set out, were correct. He had been waiting for a practical scheme which would attract the capitalist. True, the capitalist got cheap land, but he thought that in this, as in housing, the effect on an undertaking of the relative cheapness or dearness of land could be very much overestimated. The effect of the difference between cheap and dear land on the profit and loss account of a big concern was small compared with the many other considerations which influenced the account, and therefore they must look for some motive other than the question of price of land. Rates might affect it; but he thought there must be some other reason, though what that reason was he had not been able to discover. Perhaps the author might have an idea, but he had not revealed it in the Paper. Unless there was a strongly working interest to induce the capitalist to shift his industrial concern into the country, he was afraid there would be no great improvement in that direction.

It was true that the growth of motor traction and transport and the development of the telephone—neither of them old in point of years—had had some effect in that direction, and they had got beyond the stage when it was felt that no business could be successfully conducted except in a town under the eye of the director,

as with the telephone the difficulties of managing from a distance had been considerably overcome. But that hardly solved the problem of transferring big industrial concerns from town to country. An employer proposing to establish a new industrial concern would be likely to go where he would find labour properly housed. It was hardly to be conceived that he would go to a district where he would experience difficulty in getting labour to the work. Time would be lost and the business would suffer. The housing problem and labour react on one another, and only when the housing for the necessary labour was found would there be inducements for industrial concerns to shift from town to country.

One point the Paper made quite clear was that everyone desired to see an increase of home-grown food-stuffs. While, however, they stated that in general terms, it must be borne in mind that there were countries and conditions in which the staples of corn and meat could be produced at less cost than here at home. They must always rely on a certain proportion of those food-stuffs being imported. Only the increased earnings of the workers would enable them to purchase the dearer articles, the production of which could be gradually increased at home. That point was not always borne in mind when they considered the increase of home-grown food-stuffs. He again thanked the author for his Paper, and heartily seconded the vote of thanks.

Mr. G. TURVILLE BROWN said he regretted he had not come prepared to speak on the discussion. What Mr. Chambers had said had given them a great deal of food for thought. On page 69 the author said: "The

“ only effective method of raising the wages of agricultural workers, and at the same time of increasing their numbers, is to raise the value of the worker’s production, and in this direction we might produce a catalogue of constructive proposals.” He hoped anything that was done in that direction would not provoke a conflict between the agricultural and industrial world, and would help Britain to become more than ever the centre of the British Empire.

On page 70 they read: “ Next in order of importance I would place co-operation—co-operation in purchase no less than co-operation in sale.” It seemed to him that what the author meant was that a portion of the profit now made in towns might equally well be made in the country; and he thought it could be done. A great deal of the profit which agriculture might legitimately make was now wasted in the profits of middlemen, merchants, and others.

He was glad Mr. Chambers had mentioned the education question, as he thought that by teaching children, both urban and rural, more about the advantages of rural life much might be done to stem the exodus from the country. As the workers got more money he saw no reason why the example of the middle and upper classes should not be followed, and a greater number of their children be educated at boarding schools rather than at home. At present it sounded Utopian, but he had great hopes that such a change would come.

Regarding the transport problem—so far as small holdings were concerned, the only thing that he thought could be done would be the extension of the agricultural parcels post. He had made that suggestion before, and would much like to see such a scheme started.

The author also said: “ Each industrial centre becomes

“ a market for the sale of a certain amount of produce,” and in that connection they should take this fact into consideration : at present the population of these islands was about 45,000,000, but he hoped that many of those present would live to see the population nearer 60,000,000, while probably there were people living who would see it grow to 80,000,000. That meant there would be a great number of other industrial cities of which they at present know nothing, and could not even forecast their sites. He was glad to see the suggestion made that factory workers should be taught to take an interest in gardening, and even, in a small way, in agriculture, because he knew, from his own experience in colliery districts, that colliers were good gardeners. Probably with an extension of the Eight Hours Act, which at present only applied to coal mines, there would be a great movement in that direction.

He was afraid he had to agree with the author when he said that the authorities have not “ shouldered “ their responsibilities in the matter of housing,” but he saw distinct signs in some coal districts, and to some extent in cotton and woollen districts, that both the people and the capitalists were beginning to wake up. There were good examples in the way of colliery villages which were likely to be copied if the difficult question of capital could be overcome.

On page 80 they read : “ There are to-day four classes “ upon whom the lives of the people may be said to “ depend : the Central Government, the local authorities, “ the individual capitalist, and groups of the people “ themselves.” By “ groups of the people themselves ” did the author mean the trades unions ? Already an enormous amount of the capitalists’ energy was expended in discussing questions with trades unions, and

if, in addition to those difficult questions, they were going to add discussions as to the way a street should be built, or where a new village should be established, he thought they would not be able to go on. He considered the Paper was drawn in the broadest possible way; there was nothing niggling about it, and he admired it very much, and was in thorough agreement with it.

Mr. J. H. SABIN (Member of Council) said he would add his meed to the gratification that was felt to the author of the Paper because he combined the qualities of the idealist and the practical man. He knew the difficulties, and at the same time, as a true idealist, looked forward to the solution of those difficulties.

The author had adverted to the necessity for co-operation, which was almost a problem in itself. It was the most difficult thing to get English farmers to co-operate. He had had an excellent example of that recently. There were three men on three farms in one parish living almost next door to one another, and cultivating the same description of land, one of whom was most anxious to buy a motor plough. He could not find enough work for it on his own land alone, so he invited his fellow-tenants to join with him in purchasing one, but they made difficulties; they did not know what a motor plough would do, and so on. With regard to the smaller men, however, he found that there was a desire to co-operate. The fact must not be overlooked that there had been great advances recently in co-operation among the smaller farmers, and good advance lately in small culture, and by the aid of the Small Holdings Acts a large number of smallholders had been created,

who had already increased food supplies of the character to which Mr. Hunt had referred. He had in mind one farm of 323 acres where, instead of a farmer, a man, and his housekeeper, there were now some ten families and a considerable number of allotment-holders, who, instead of having half a dozen cows, as formerly, were now milking forty cows, with the expectation of a larger increase as their capital increased. That was in the hands of a Small Holdings and Allotment Association. But they had to recognise that they all had idiosyncracies, and while it was impossible to persuade one man that it was good to go out into the dirty country, walk in heavy boots, and live in depressing circumstances for half the year, by telling him that he was doing a patriotic duty in farming the land, another man, such as one he found last week, was not deterred by the fact that he had to go through a mile of clay road, and open four gates before he got to his farmhouse.

The education of children in the rural districts was a serious matter. One constantly found the difficulty, and unfortunately it arose just in those cases where education was most wanted, because the farmer could send his children where the labourer could not. He did not know whether they would ever arrive at that idyllic state, of which Mr. Brown spoke, when the labourer's children would be sent to boarding schools. If a man lived on a lodge farm the children had often to go some miles to school, whereas if a man had any desire for the real education of his children he would try and shift into better quarters, and unfortunately the better quarters were sometimes in a town. Often the moving spirit was the wife. She would say, "I want my children brought up differently from the way I was brought up myself, and we must get nearer to the town," which was

most reasonable and very proper. Those were the difficulties they had got to get over, and if Mr. Chambers could help with an ideal scheme they would be grateful to him both as agents and as patriotic Englishmen.

Mr. W. R. DAVIDGE said he felt sure that they would all be in general agreement with the author's conclusions. In the future they must look to a very different set of conditions from those to which they were accustomed. First they must expect a greater activity on the part of the State and local authorities. He saw a great field of action for them. The point about the motor plough might well be got over by an extension of the powers of the rural councils, enabling authorities to get those and other necessary things. Of course after the war the State itself would be in a very different position in regard to its control of the various industries and the possession of means of transport. At the present moment it owned thousands of motor lorries, which would be of inestimable use after the war for the development of the country districts. The means were ready at hand, and it only required an extension of the powers of the local authorities to bring them in touch with local needs. They should not be hampered at every turn by limitations, but should be brought into relationship with the welfare of the people, the local councils being used in the way of a co-operative society, and have some department possibly made up of a tribunal of business men, which could say to the larger concerns, "You are in the wrong place in the town; you must go to the country. You can have your choice of half a dozen places, if you like; but go you must. The State will help you to go, because it is for the general benefit that you should go elsewhere."

No doubt, as regards the interpenetration of rural with industrial conditions, they would have to transfer large businesses and many smaller businesses to country centres.

The difficulties of starting new towns, such as Letchworth, had been touched upon, though the author had not done Letchworth justice when he said that it had not developed as rapidly as other towns. The first twelve years of such an undertaking were, of course, the most difficult. He was, however, on safe ground in saying that it was easier to take an existing centre where the preliminary work was complete than to start a new one. However, with the preliminary expenses guaranteed by the State or combination of capital it would, in time, be feasible to start new communities. But, as had been said, they must be prepared in the near future to face entirely different conditions, and he felt sure that, in order that the bulk of the people might have more share in the shaping of their own concerns, they must possibly expect to be dictated to, and give up a little whilst getting more freedom of action themselves. They had now to face the danger of emigration on a scale unprecedented in their history, and unless they were prepared with a scheme which would keep people not only in the country districts but in England itself, they would be faced by very great difficulties. They had two alternatives, they must either tackle such a scheme as was suggested by Mr. Chambers, or they must allow the people to go elsewhere.

He was sure that when thanking the author for his statesmanlike Paper he was only supporting the feeling which would be expressed by the whole country when it had had the opportunity of studying his proposals.

Mr. RICHARD G. G. REED (Fellow) observed that one of the chief difficulties was summed up when the author said "It is necessary to do something to make the worker desire to leave the towns and to keep him in the country," for it was no good placing the worker in the country unless at the same time they made him desire to be there. Some years ago an institution for retired broken-down actors was built in Woking, with the result that in the first year there were so many suicides, through the inmates becoming bored, that the survivors were brought back to town and the institution put to other uses. Another case was of a hospital for old folk in the very centre of Croydon, which certain people wished to remove, one of the suggested reasons being that the poor old people would be much happier in the quiet outside the town. But the poor old folk in the hospital unanimously elected to remain in the centre of the town.

They had lately heard that a number of women workers had been trained by a public body for dairying and to go on the land, but within a few months they all came back, having been bored to death with dairying, preferring to drive trams, or otherwise keep in touch with town conditions. That was the difficulty referred to. It would seem to be easier to keep the existing rural population where it was than to keep the town population in the country after once taking them there.

With regard to getting people to occupy their leisure hours in some form of agricultural pursuit, he was very glad to hear that the collier made such an excellent gardener, because that was not so with some other workers. In a south-western district the council had made it com-

pulsory for all cottages to be provided with long back gardens, so that every occupier might have an allotment at his back door. A railway company brought a number of workmen into that district, and the only cottages to be had were those with the long back gardens. The men did not want the long back gardens, which in time become wildernesses. The company applied to the council for permission to build houses with short gardens, but the authority objected, and in the end the company made a colony for the men outside the district, gave them short gardens, and brought them every day by train to the works.

Most of the speakers had touched on the question of co-operation, and his small experience agreed with Mr. Sabin's, that the small farmer with 80, 100 or 120-acre farms was willing to co-operate in machinery, horses, labour, &c. If this could be extended to smallholders, they were likely to be much more successful in future than in the past. But that did not apply to labourers on another man's holding, but if the recommendations of the public committees dealing with these questions were carried out and the price of corn were kept up, leading, as they presumed it would, to a rise in the wages of the agricultural labourer, that would have more effect than anything else. Then, if the town workers moved into the country on the lines suggested in the Paper, they would have a large number of their children as well as the children of the agricultural labourers educated in rural questions, and it was probably they who would turn their attention to agricultural pursuits rather than the industrial workers themselves.

The vote of thanks having been carried unanimously,

Mr. THEODORE CHAMBERS, after thanking the proposer and seconder and the speakers for their kind expressions of opinion, said in reply: Constructive policy was always a fair target, and, being generally a large one, was easily hit. He would like to emphasise what he intended to be the underlying motive—the *motif*—of his Paper, *i.e.*, that they had got to work by natural causes and not by artificial pressure; he was what was called a “natural causes man.” He was entirely with Mr. Reed that they must look for the causes underlying all these questions, and not resort to the quack method of merely putting a plaster on a social evil. Mr. Young talked about Scotland in a rather superficial way. He appeared to overlook the fact that the substitution of deer for food growing was due to natural causes, deer breeding being more profitable than food growing. The people went away because they could not support life on the poor land and under the conditions that existed. The work of the Congested Districts Board made one realise the whole point. The Board was established because the people increased more rapidly than the means of subsistence; one had to take them away because they could not live in large numbers on such barren soil as one found in parts of the north of Scotland. Deer breeding was profitable; people would pay a very big rent for deer forests. Many benefits in life came to those who continued to exist in those parts from the large rateable values of those deer forests. In many cases, under normal conditions, a deer forest was an economic blessing, although it might not be so just at the present moment. Mr. Hunt had said that he was glad he (the writer of the Paper) had recognised that wages must be

raised. But he did not believe in raising wages merely for the sake of raising wages. What he urged was that the wage-earners' work should be given increased value, and then the wages would automatically rise. He did not advocate minimum wages as such, nor did he approve of legislation to secure a minimum wage. The root of the question which they wanted to reach was, How could the wage-earner get more money from the fruits of his production?

As to Letchworth, here again, the answer was "natural" causes. He would ask Mr. Davidge to look at Letchworth in this way, viz., that there were thousands of cities which had grown up in the world entirely due to natural causes, such as the discovery of oil or coal, or a navigable river being opened for commercial purposes, or owing to there being some point for change of transport, that place had become a natural centre of exchange. Towns had sprung up with ten times the rapidity of Letchworth, which had been built under more or less artificial conditions. He suggested, therefore, that with natural conditions the growth would have been more rapid. On the question of State action Mr. Davidge used three terms which he (the speaker) was inclined to deplore, viz., "State interference," "compulsion," and "dictation." All those three things, State interference, State compulsion, or State dictation, were to be deprecated. What we wanted to see was State *assistance*—a very different thing, and it was in the direction of temporary State assistance and not of State interference that the chief hope lay for the country.

Then one came to the question of education. Mr. Brown's remarks on education were most interesting. He (the writer) had been thinking this problem out during the spring of the present year, and he had had

the opportunity of six months' travel in the north of England in which to obtain some light on the subject. He had been particularly interested when travelling daily through the West Riding and Lancashire. (On the wall were maps of the West Riding and Lancashire, which showed that the density of the population in those two counties was quite extraordinary. It was difficult to realise that to-day Manchester had grown so as to be almost in touch with Liverpool on the west and Leeds on the east. It was possible to go by tram from Manchester to Liverpool with insignificant breaks, and one could travel all over the West Riding by tramcar. The districts had become almost one huge city, with patches of agricultural land in between.) Here one found industrial penetration with a vengeance, and yet one saw extremely little small culture. He was very much bothered over this, because he had thought that industrial penetration would produce small culture. One saw that it did not. However, he had been recently discussing the matter with the Director of Education for the West Riding, who said that it was true in the past there had been comparatively a small amount of food production in the West Riding, but that he believed the effect of the war would be to increase it enormously.

The work that is being done by the Agricultural Committees, education authorities, and by the schools, was going to have an extraordinary effect in increasing the amount of food produced by the industrial classes. At Darlington the other day he learnt that the Education Committee had decided to encourage the utilisation of land on which the children might learn the elements of vegetable growing. One could not help thinking that finally the love of the garden, which English people possess, would prevail. Lord Northcliffe had

said that one of the things which struck him out at the front was that wherever he went the first thing that the Englishman did was to make a garden, and the English everywhere had now got a reputation for it. Doubtless the English people had got that love at heart, but the things which had prevented its development in the past were the long hours of work and generally unstable conditions. Hitherto one reason against the workers growing vegetables in their own gardens was, of course, that they could be bought so cheaply. If one result of the war was to increase the cultivation of the peoples' own gardens, he believed that it would amount in the aggregate to a very important increase of home-grown food.

Mr. Brown asked whether, when referring to groups of people, he had meant trades unions. He thought that the context showed that he could not have meant anything of the kind. He was referring to groups of people managing affairs which immediately concerned them and them only. He referred rather to public utility societies, co-partnership housing schemes, and that class of organisation. Trades unions were outside the scope of the Paper and dealt with a different class of matters altogether. Mr. Davidge had mentioned one matter well worth drawing attention to, viz., the State would be in possession of thousands of lorries at the end of the war. He thought that it was also important to realise that they would be in possession of factories and plant for the manufacture of motors which would be the most efficient that the world had ever before seen. Hundreds of millions of pounds had been spent in buildings and machinery, much of them of a type suitable for the production of repetitive work, and they ought to be able to produce in this country lorries by

thousands as cheaply as they could be produced anywhere. If the expenditure on main roads were transferred from local authorities to the State, and they could build up great transport services with lorries, following, or even going beyond, the Austrian system at the present time, it would be a great benefit to the country. All these things were matters for thought. They would, after the war, have an opportunity of obtaining a State motor service beyond anything they had got at the present time; and it certainly was worth while to draw attention to this. He thought that the State could reasonably run those motor services for the benefit of the whole community, and he would rank such action as State assistance, not State interference. He would have liked to have gone through many other details mentioned in the discussion, but he thought there was a general agreement that they must work upon the lines of natural causes rather than trying to adopt any short cut of State interference or State pressure.

He thanked the Meeting for the way in which they had received his Paper.

The CHAIRMAN, in closing the proceedings, said he was very sorry that the President was not present that evening, because, no doubt, he would have told them something about the remarkable changes that had taken place in Ireland during recent times. Summing up the Paper, in his opinion it really came to this: the chief cause that drove labourers from the country into the towns, more than anything else, was low wages. They could not have high wages unless they had high prices, and what they had suffered from in the past for so long was the tremendous amount of dumping, the result of

the overplus of shipping, and the low rates of transport from Brittany, Denmark, and other places, to these islands. He believed the whole of that would disappear within the next few years. For a considerable period transport was going to be more expensive, which would have the effect of raising prices, and higher prices would raise the wages in the country. That, he thought, would be the development. He wished to thank Mr. Chambers on his own behalf for his interesting Paper.

SOME NOTES ON THE DEFENCE OF THE REALM (ACQUISITION OF LAND) ACT, 1916.

By EDWIN SAVILL (MEMBER OF COUNCIL).

*Read at the Ordinary General Meeting of THE SURVEYORS'
INSTITUTION, held on Monday, 12th February, 1917.*

GEORGE FRANCIS STEWART (President) in the Chair.

When considering how to deal with a paper on this subject, I thought of writing a short history of the events which led up to the need for the Act. This might possibly have been of interest, but when I had completed my notes upon the Act itself I realised that your patience would be fully taxed in listening to them, and as it is not material to the subject under discussion, I reluctantly decided that the history should be omitted. I should, however, like to draw attention to the huge increase in the area of the property under the control of Government departments; to the increase in, or rather the creation of, the Lands Branch of the War Office and the Ministry of Munitions, now happily amalgamated; to the work of organisation, construction, and control, and to the resultant difficulties and successes. But I will merely beg you to dwell on the fact that 150,000 acres of land have been taken over since the beginning of the war, and that the annual value of buildings acquired during the same period is approximately £2,500,000.

The reasons for the introduction of the Bill were clearly set out in the Memorandum attached thereto. The main object was the protection of the State against the loss it might have incurred owing to the fact that buildings of various kinds erected on land belonging to private owners, possibly with valuable machinery attached, would in the ordinary course have reverted to the owners of the land. No doubt under the Defence of the Realm Acts these buildings could be removed, but in many instances they are of great value where they stand, and, if removed, would be of little value. Businesses having a potential value to the State have been created, and without such an Act as this they might have been destroyed or have passed gratuitously into the hands of the owners of the land.

I need not follow the progress of the Bill through both Houses of Parliament, although the debates were of great interest. Much matter for controversy arose, but much was avoided by reason of the Department taking what we must consider the very wise course of referring the first draft to two Members of our Council, and, subsequently, a later draft to the Council itself. One can only wish other departments would more freely consult this Institution upon technical matters. I feel sure that I may say on behalf of this Institution that the unique knowledge and experience which is here available would always be placed entirely at the service of the department, and that all questions referred to The Institution would invariably be considered judicially and from the point of view of the national interest, without regard to any political party or selfish considerations.

With these few remarks I will come to the Act itself.

Sections 1 and 2.

Give powers to certain Government Departments already in temporary possession of any land to continue the occupation for a certain period after the war, and during that time to remove any buildings which have been erected at the expense of the State.

Land.—Under Section 12, Subsection (1), land is stated to include any building, or part of a building, any pier, jetty, or other structure on the shore or bed of the sea or any river, and any easement or right over or in relation to land.

Section 1.

Subsection (1).—The powers under this section relate to any land of which possession has been taken during the course of the war or within the week immediately preceding its commencement. The ruling date, therefore, is July 28th, 1914.

Possession must have been taken of the land by or on behalf of a Government department for purposes connected with the present war, whether in exercise or purported exercise of any prerogative right of His Majesty, or of any powers conferred by or under any enactment relating to the Defence of the Realm, or by agreement or otherwise. The Government department in possession may, after the termination of the war, continue in possession for a period not exceeding two years, and, with the consent of the Railway and Canal Commission, referred to as "the Commission," for a further period not exceeding three years, making five years in all.

The department must be in possession at the termination of the war.

A certificate by any Government department shall

be *primâ facie* evidence that the land is in possession of the department. (Section 10 (a).)

The period of two years runs from the termination of the war. To extend this period the department must make application to the Commission six months before its termination, and the continuance of occupation can only be with its consent, the department having to show that it is necessary or expedient in the national interest.

The occupying department may transfer possession to the Admiralty, Army Council, or Minister of Munitions.

There are at least three points upon this subsection which appear to me to require clearing up:—

1. Nothing is said as to the owner or former occupier of the land having the right to appear before the Commission to protest against the continuance of the occupation after two years. One must assume that he would be given such right, and that the Commission would take into consideration his objection.

2. The same omission applies to the provision that the certificate of a Government department is *primâ facie* evidence that the department is in possession. This question is likely to lead to much dispute, and the owner should certainly be heard.

The words “during the course of the war” will, at some future time, need definition.

3. Apparently the occupying department can give up possession of the land at any time without notice. This is hardly reasonable, because it would almost certainly entail a loss of rent to the owner, even if he knew the land had been vacated, but in many cases he would not know. I have already come across instances where the owner is uncertain whether his land is in military occupation or not. Notice has been given to take the land,

it has been occupied and subsequently the troops have left, but no notice having been given to the owner he does not know whether the vacation is temporary or permanent, and consequently he dare not let his land, and it remains idle and gets into bad condition. If the vacation proves to be permanent he loses his rent, and the strange part about it is that he is unable to ascertain what is the position. In some cases, no doubt, the length of the notice to be given might form part of the terms and conditions, but it would have been reasonable to have placed the obligation upon the department of giving notice within three months of the termination of the war of their desire to continue in possession.

Subsection (2).—The occupying department may, while the land remains in occupation, exercise such powers as were exerciseable during its occupation in war time for the purposes of the Defence of the Realm, subject, as regards the closing of public highways, to Section 6 (3), and as regards the removal of buildings subject to Section 2.

The owner and occupier of adjoining lands are within certain limits safeguarded under (a) and (b), which provide that where, but for the powers contained in this Act, they would have been entitled to restrain the user, they shall under the Act be entitled to compensation during the period of occupation for pollution, abstraction, diversion of water, damage by noxious fumes, and injury to property caused by accident due to the exercise of such powers.

Subsection (3).—Provides for the payment of rent and compensation, the amount, failing agreement, to be determined in accordance with the provisions of this Act.

The wording of this subsection presents many difficulties. The occupying department shall pay rent in respect of any land which continues in its occupation, "and such continuance shall be upon and subject to "such terms and conditions as to compensation or "otherwise (including compensation for any depreciation attributable to works and buildings not removed)," &c.

The owners appear to be in a very invidious position. They have for the most part given the departments a free hand, that is to say, they have made no objection to the free exercise of all departmental powers, and rents and compensation in many cases have been nominal. Many owners are no doubt anxious to regain possession of their land at the earliest moment compatible with national interest. No provision is made for the occupying department at the termination of the war to give notice to the owner that occupation is to continue. Presumably it may continue automatically for two years, the department having the power to abandon the land before the termination of the two years. Provision is made for fixing the rent, but the terms and conditions as to compensation or otherwise would appear to have to be fixed at the beginning of the continuance. In ordinary circumstances it would seem desirable that the compensation should be settled at the time of the subject-matter of the compensation arising. Compensation for consequential damage might be fixed at the time of the continuance, but compensation for damage to the land for buildings not removed at the expiration of the holding should be fixed when the occupation ceases. Owners will need to be very carefully advised if in fixing the terms many items of compensation are not to be omitted.

The amount of rent is, to a certain extent, governed by paragraph 6 of the Schedule, appreciation or depreciation caused by acts or works of the Government upon it or neighbouring lands not being taken into consideration.

Section 2.

Subsection (1).—Under this subsection the department has the right after the termination of the war, and while it remains in occupation of the land, to remove any buildings or other works it has erected for purposes in connection with the war, or buildings or works erected with the consent of the department at the expense of some person not interested in the land. Provided that (a) where the building or work was erected partly at the expense of the landowner, or (b) where under an agreement with the department the landowner is entitled to the building or work, the department shall not have power to remove the building without the consent of the landowner.

Nothing in this subsection shall prejudice the right of the department where, under an agreement, the department has the right of removal.

It appears obvious that the department must retain possession of all land upon which buildings have been erected pending a decision as to whether the buildings are worth removing, and, in cases where it is decided to remove, the department must retain possession until the removal is completed. This will necessarily entail great delay in the relinquishment of land for which, but for this clause, the department would have no further use. Where buildings occupy a small portion of the land only, it would seem advisable for the department and the owner to come to an arrangement whereby the

owner should retake possession subject to the department's right to remove the building within a fixed time. By this means the country would be saved a considerable sum in rent.

Subsection (2).—Where any building or work has been removed under this section, the department shall restore the land to its original condition, or compensate the owner for depreciation caused by the disturbance of the soil.

It must be remembered that the continuance of possession after the war shall be upon terms and conditions as to compensation or otherwise as shall be agreed or arbitrated upon. Section 2 (2) makes provision only for reinstatement of, or compensation for, the disturbance of the soil where buildings or works have been removed, but nothing is said as to reinstatement of, or compensation for, the disturbance of the soil on other parts of the land. For example, where lands are used for an aerodrome a few sheds are erected, and if they are removed, the land upon which they stood has to be reinstated or the owner compensated, but that is a very small part of the damage. Ditches may have been filled in, drains blocked, hedges removed, and timber felled. I assume that if the land is given up at the termination of the war the owner would be compensated for all these things by the Defence of the Realm (Losses) Commission, but if the department continues in possession after the war, then all these matters must be arranged for in settling the terms of the continuance. If they are omitted no compensation need be paid.

Subsection (3).—This deals with the removal of buildings and works from commons and apparently safeguards all interests of the public.

Subsection (4).—Protects the department from claims upon buildings, fixed or attached, machinery, or plant, by mortgagees or others, beyond the owners of the land, who may be interested in the land.

Section 3.

Deals with the purchase of land, and, unlike the preceding sections which come into force only on the termination of the war, this section came into force upon the passing of the Act, and gives powers to the Government to purchase (a) any land in the possession of an occupying department or any interest in such land; (b) any land on, over, or under which any buildings, works, or improvements have, for purposes connected with the present war, been erected, constructed, or made, wholly or partly at the expense of the State, or any interest in such land. The powers are limited in time to within three years of the termination of the war.

For the purpose of the acquisition of land the provision of the Lands Clauses Act shall be incorporated with this Act subject to the modifications contained in the Schedule to this Act. Therefore notice to treat can now be served upon any owner whose land is in the occupation of one of the Government departments, or upon which buildings have been erected by such department. It should be remembered that a certificate by the department is *primâ facie* evidence of its being in possession of land, but whether this fact has to be determined before or after the serving of a notice to treat is not clear, although it seems desirable that owners should comply with the provisions of the Lands Clauses Act even though it is considered advisable to dispute the occupation.

Subsection (2).—This subsection gives power to the department to acquire any adjoining or neighbouring land (whether belonging to the same owner or not), or any right of access or other right which appears to the Commission to be required for the proper enjoyment of the land so acquired, but this power can be exercised only during the present war or within three years after its termination.

Again, there is doubt as to whether the notice to treat is to include adjoining land belonging to the same owner, and if so, whether this has to be the subject of a preliminary inquiry, or is to be dealt with at the hearing of the case for the acquisition of the land in the occupation of the department. If it is to be the subject of a preliminary inquiry, the rights of the owner to appear and give evidence are not clear. If it is to be dealt with subsequently it would be necessary for the arbitrator to give his award subject to the ruling of the Commission as to the department's right to acquire the further land. It appears desirable that this point should be determined before any other steps are taken, otherwise much time and money will inevitably be wasted.

Subsection (3).—Gives power, if the department desires, to acquire the mines and minerals under the land with such right of support as the department deems advisable.

Subsection (6).—Prevents any person removing, destroying, or altering any buildings, works, or improvements erected by the department whilst the rights of the department to acquire the land remain in force.

Subsection (7).—Gives power to owners having the right of sale to grant or demise the land in perpetuity

or for any term of years, with or without a right of renewal, or to grant the department an option to acquire the land, but only where such consent is necessary under the Settled Land Acts with the consent of the trustees or with the sanction of the Court.

Section 4.

Deals with the manner in which land acquired by the department may be used.

Any land which has been acquired under this Act may be used by any Government department for the purpose for which it was used during the war, or for any other purpose for which it could be used had the land been acquired under the Defence Acts or Military Lands Acts. The owner has no power to restrain such user, nor has any person interested in any neighbouring land, nor anyone who is entitled to any riparian rights: but if, apart from this Act, such person would have been entitled to restrain such user, then, if application is made within three years after the acquisition of the land, or after the commencement of the user causing the depreciation, he shall (i.) be entitled to compensation for damage caused to his riparian rights, or any breach of a restrictive covenant, or the emission of noxious fumes if the land is used for any purpose for which it could have been used had it been acquired under the Defence or Military Lands Acts, and (ii.) if the land is used for any other purpose he shall also be entitled to compensation for damage caused by such user; the compensation in either case, in default of agreement, to be decided in accordance with the provision of this Act. Provided that—

- (a) The department shall have the right in manner provided by Section 3 of this Act to acquire

land in respect of which a claim for injurious affection is made ;

- (b) The owner or person interested shall have the right to recover damages for injury to property caused by accident due to such user ;
- (c) In the using of the land the provisions of the Alkali, &c., Works Regulation Act, 1906, and the Rivers Pollution Prevention Acts, 1876 and 1893, and of any local Act shall be complied with, and nothing in this section shall affect the powers conferred by any Act, whether public, general or local, on any local authority, board of conservancy, or other public authority in respect of the prevention of the pollution of rivers or abatement of nuisances caused by smoke or noxious fumes.

This section gives very wide powers to the department as to user, while the limitations are slight. Under the Defence Act, 1842, the Government may do anything on the lands taken beneficial to the public services, except that land taken under compulsory powers may not be used for the barrack service or for the erection of any barracks thereon.

The Military Lands Act, 1892, gives owners and others an opportunity of being heard at a public local inquiry *before* the land is taken compulsorily, the purpose for which it is required being stated by the Government. It does not appear likely that these provisions would affect this section, because under it the land can be used for any purpose for which it could have been used "had it been acquired," &c., and not "were it "about to be acquired." It seems clear that apart from

the rights of user given by the Defence Acts, and so authorised by this Act, any particular piece of land can only be used, after acquisition, for the purpose for which it was used during the war, that is to say, it cannot be used for any other purpose for which it might have been used when taken under the Defence of the Realm Acts if that purpose is contrary to the Defence and Military Lands Acts.

User is further restricted by Section 13 (5), which provides that land cannot be acquired compulsorily without the consent of the Commissioners if it is required for purposes other than those for which it can be acquired under the Defence and Military Lands Acts.

Section 4, as already mentioned, limits the owners' rights to claim compensation for damage caused by any breach of a restrictive covenant, damage to riparian rights, and damage by noxious fumes, in the case of land used for such purposes as it could have been used for had it been acquired under the Defence and Military Lands Acts, but no provision appears to be made for compensating owners where the purpose for which the land is used carries with it clearance rights and restrictive rights. Much land has been affected by these rights during the war, as in the case of some seaside towns, where development has been seriously interfered with, and where, unless large numbers of defence works are to be abandoned after the war, very serious loss will apparently fall upon owners of property in those localities. There are, no doubt, other causes of damage to adjoining properties, such as vibration, for which owners would have the right of claim but for this clause.

Section 5.

Under this section the Government may at any time sell, lease, or otherwise dispose of the land acquired.

Subsection (2).—Protects the purchaser in matters connected with the title to the land, and makes provision for compensating an owner who establishes an interest in the land which has not been dealt with.

Subsection (3).—Gives the owner of land the right of pre-emption to any land upon which no permanent buildings have been erected, or which is not used in connection with any permanent buildings. In the event of the right of pre-emption being declined by the owner, the offer shall be made to the person or to the several persons whose lands immediately adjoin the land proposed to be sold.

Subsection (4).—Gives owners six weeks, after receiving the offer, to determine whether they will exercise their right of pre-emption or not, the right entirely ceasing at the end of that time.

Subsection (5).—In default of agreement between the department and the owner, the price to be determined under the provisions of this Act.

Subsection (6).—The last three foregoing subsections apply to the leasing of land for a term exceeding 21 years, except where the land is leased for the purpose of its development in connection with any factory, building, camp, or other premises erected or established on land retained by the Government.

It is difficult to decide how much owners will benefit under this section, as so much depends upon buildings "of a permanent nature." It is easy to realise the Government's difficulty. There are, no doubt, many cases where buildings spread over the land of more

than one owner, and the right of pre-emption, could not be given without sacrificing the value of the buildings, but no reason is apparent why an owner should not have been given the right of pre-emption where the complete set of buildings was wholly upon his land. It is probable that there may be some interesting cases on the question whether buildings are of a permanent nature, and whether land is being used in connection with permanent buildings. Much may be suffered with complacency from the State, but from individuals the position is entirely different. It is assumed that on all questions of user after sale or leasing the owner would be free to take action without consideration of the provisions of this Act.

It seems clear that under Subsection (5) of this section the price to be paid by the owner shall be governed by paragraph 6 of the Schedule without regard to any enhancement or depreciation attributable to any buildings, works, or improvements erected on the land or any neighbouring land for purposes connected with the present war. There will no doubt be cases where the value of the land has been enhanced or depreciated by buildings erected for purposes of the present war, and still more enhanced or depreciated by buildings which have been erected since. I envy arbitrators the knotty points they will have to solve in apportioning the blame or the praise to the war and post-war buildings.

Section 6.

Subsections (1) and (2).—These subsections deal with matters in connection with the interference with public highways by the laying of tram lines or pipes over and under them.

Subsection (3).—Where under powers conferred upon the military authorities any public highway has been closed, it may not remain closed after the expiration of twelve months after the termination of the war except with the consent of the Commission. The Commission, before giving a consent, shall hear the public authorities interested, “and any person interested in “any land adjoining any highway so closed shall be “entitled to . . . compensation.”

“*So closed*” seems to mean closed with the consent of the Commission, so that for the first twelve months after the war owners do not appear to have the right to claim compensation for damage to land affected by the closing. It is difficult to see any reason for this.

Subsection (5).—Provides that this section shall not override agreements under which a time is specified during which tramways, &c., may remain upon highways or roadways may be closed.

Section 7.

This section deals with water and lighting, and, under certain conditions, allows companies to continue to supply outside their areas. It is to be hoped that the Commission, unless there are very good reasons to the contrary, will allow the mains to remain, not only for the purpose of supplying the particular Government factory for which they were originally intended, but will also allow them to be tapped *en route* where they are of sufficient capacity.

The section is an extremely interesting one, but there is not room to deal with it in this Paper.

Section 8.

Under this section the method of arriving at the amount of compensation is laid down.

Subsection (1).—(a) If both parties agree within such time as may be allowed by the Commission, compensation shall be determined by a single arbitrator agreed by the parties.

(b) Within such time as may be allowed by the Commission, at the request of either party, compensation shall be determined by a referee selected by the Reference Committee from a panel appointed in the same way as under Part I. of the Finance (1909-10) Act, 1910. The referee's decision shall be final, subject to appeal to the Commission on any point of law.

(c) In any other case it shall be determined by the Commission.

These provisions are eminently satisfactory, and if the panel is selected with the care with which the panel under the Finance Act was chosen, nothing but good can result. It has given universal satisfaction, and I have never heard either its methods of conducting a case or the fairness of its findings criticised, and although many awards have been challenged on points of law in the Courts, the majority have been there upheld. In this Act when an arbitrator is appointed under (a) there is an appeal to the Courts in the ordinary way, but where a referee is appointed under (b) the first appeal is to the Commission.

*Subsection (2).—*Where questions are referred to the Commission, the provision of the Railway and Canal Traffic Act, 1888, shall apply. The procedure under this Act is very similar to that under a Court of Law ;

there is no appeal from a decision of the Commission on a question of fact. The subsection provides that—

- (a) The Commission may call in for its assistance one or more specially qualified assessors;
- (b) The Commission may hold a local inquiry, and may delegate its offices and powers in holding such local inquiry to any one of its members, or to any officer of the Commission, or to any person whom it may direct to hold the inquiry. The person directed to hold the inquiry shall report the result to the Commission. The provisions of the Railway and Canal Traffic Act, 1888, as regards appeals shall not apply to these inquiries;
- (c) The Commission may act by two of its members, one of whom shall be the judge;
- (d) Deals with the question of costs, and gives the Commission discretion, subject to the provision of the Lands Clauses Acts as modified by this Act.

Section 9.

Provides for the payment of sums awarded to owners.

Section 10.

Gives considerable powers to Government departments, and this section is set out in full:—

“For the purposes of this Act a certificate by any
“ Government department

- “(a) that possession has been taken of any land
for purposes connected with the present war;
or

- “(b) that the department is in possession of such land or is the occupying department within the meaning of this Act ; or
- “(c) that any sums therein specified have been expended by the State in erecting, constructing, or making buildings, works, or improvements for purposes connected with the present war on, over, or under any land ; or
- “(d) that any such buildings, works, or improvements have been erected, constructed, or made with the consent of the occupying department at the expense of a person not being a person interested in the land ; or
- “(e) that a railway or tramway has been laid along, across, over, or under a public highway, or that a public highway has been closed, in the exercise of any prerogative right of^t His Majesty, or any powers conferred by or under any enactment relating to the defence of the realm for purposes connected with the present war ; or
- “(f) that water, light, heat, or power has been supplied to any premises on the requisition or at the request of a Government department for purposes connected with the present war
- “shall be *prima facie* evidence of the facts therein
“stated.”

Section 11.

This section deals with streets, buildings, or works which are contrary to the provisions of local by-laws, and should be read carefully, particularly by those who have erected buildings at their own expense, of which

the department has no power of removal (Section 2 (1)), or where the department does not remove buildings and the owner is entitled to compensation for their non-removal (Section 1 (3)), as under this section the public authority has power to order alterations to be carried out to make the buildings comply with the by-laws or to order their removal after such buildings have passed into private hands.

The owner has the right to appeal to the Local Government Board.

Section 12.

Subsection (1).—Defines “land” as set out on page 107 of this Paper.

Subsection (3).—Among other definitions states that the expression “building” includes machinery and plant fixed or attached to the building.

Subsection (5).—Provides that a competent naval or military authority, acting under the Acts relating to the Defence of the Realm, shall be deemed to be a Government department.

This last subsection is a very important one, and is likely to give rise to a good deal of dispute. Under Section 10 a certificate by any Government department that certain things have been done shall be *primâ facie* evidence that they have been done, and this Section 12 (5) states that a competent naval or military authority shall be deemed to be a Government department. Questions will no doubt arise whether acts done have been done by a competent naval or military authority as defined by Clause 62 of the Defence of the Realm Regulations, revised to December 31st, 1916. Under that clause the competent authority must be, as regards the Navy, an officer not below the rank of lieutenant-

commander, and, as regards the Army, an officer not below the rank of field officer.

On account of great emergency land has been taken in some cases in a very haphazard way. "Somebody" has stepped in and taken it, and it is sometimes extremely difficult to ascertain who that "somebody" was. The onus of proof that he was a competent naval or military authority appears to rest upon the department proceeding under this Act, and it must be assumed that the decision of this point will rest with the Commission. It is therefore to be hoped that the owner of the property affected will be able to give evidence before the Commission. It seems inevitable that the department, in some cases, will be likely to find itself in considerable difficulty.

Section 13.

Prevents a department taking powers under this Act to acquire any common, open space, or allotment, or, except by agreement, any part of a park, garden, pleasure ground or home farm usually occupied with the mansion-house. Provided that—

- (a) The foregoing shall not affect the right to acquire the right to use and maintain cables, lines, or pipes which have been laid under such land. It should be noted that the word "under" is used and not "under or over."
- (b) Neither shall it affect private lands before mentioned upon which buildings for the manufacture of munitions have been erected before the passing of this Act, and where the acquisition of such land is shown to the satisfaction of the Commission to be necessary from a national standpoint, but the owner may in

this case require the department to take the whole of such property including the mansion-house, if any, and the matter cannot proceed until a draft of the order made by the Commission for acquiring the land has been laid before each House of Parliament.

Under this section with regard to the acquisition of park lands, &c., the department appears to be entirely in the hands of the owner. It is not left to the Commission to decide whether it is reasonable for the owner to demand that the whole of such park, &c., shall be acquired in cases where the department has acquired power to take any part; but if the owner "so requires" the department is bound to take the whole. There will no doubt be cases in which there will be differences of opinion as to what lands form part of a park or home farm, and it is not clear whether owners will have an opportunity of voicing their opinions. Considerable care will have to be used by the department, or it may find that in acquiring a comparatively unimportant munition factory it has made itself liable for the purchase of a large area of land with perhaps a mansion in addition which it does not require.

Section 13.

Subsection (2).—Deals with lands belonging to local authorities, public companies, and charitable bodies, and prevents departments retaining possession for more than three months after the war without consent, and for more than three years with consent.

Subsection (3).—Provides that where possession of any land has been taken under an agreement which specifies the time at which it has to be given up, possession cannot

be retained after that time without the consent of the person with whom the agreement was made.

Subsection (4).—Further prevents interference with agreements and provides that, except as regards an agreement for a tenancy, land cannot be compulsorily acquired where an agreement has been entered into that it shall be restored to the owner, and that the powers of a department for acquisition under this Act shall not interfere with an agreement for sale to a Government department.

Subsection (5).—Deals with user and has been referred to under Section 4.

SCHEDULE.

MODIFICATION OF THE LANDS CLAUSES ACTS.

1. The department acquiring the land or interest therein shall be deemed to be the promoters of the undertaking, and this Act shall be deemed to be the special Act.

2. The provisions as to the sale of superfluous land and as to access to the special Act shall not apply.

3. All questions of disputed compensation shall be settled by an arbitrator, or referee, or the Commission, as the case may require (hereinafter referred to as “the arbitration tribunal”).

4. No allowance shall be made on account of the acquisition being compulsory.

5. Where a portion only of any factory or other building is required, the owners and other persons interested in such building may, notwithstanding anything in the Lands Clauses Acts, be required to sell and convey the portions only of the building so required if the Commission are of opinion that such portions can be severed from the remainder of the properties without material detriment thereto, and in such

case compensation shall be paid for the portions required, and for any damage suffered by the owners or other parties interested in the building by severance or otherwise.

6. In determining the amount of compensation, the value of the land acquired shall be taken to be the value which the land would have had at the date of the notice to treat if it had remained in the condition in which it was at the commencement of the present war, without regard to any enhancement or depreciation in the value which may be attributable directly or indirectly to any buildings, works, or improvements, erected, constructed, or made on, over, or under the land, or any adjoining or neighbouring land for purposes connected with the present war wholly or partly at the expense of the State, or, with the consent of the occupying department, at the expense of any person not being a person interested in the land :

Provided that—

- (A) where any such building, work, or improvement was erected, constructed, or made in pursuance of an agreement with any person interested in the land, the consideration given by such person shall be taken into account in assessing the compensation payable in respect of such interest ;
- (B) where by virtue of an agreement with any Government department any person interested in the land is entitled as between himself and that department to the benefit of any such building, work, or improvement, the value attributable to such building, work, or improvement shall be taken into account in assessing the compensation payable in respect of such interest ;
- (C) where, since the commencement of the present war, any person interested in the land has himself erected, constructed, or made any building, work, or improvement, or has contributed to the expense thereof, or has committed any act depreciating the value of the land, the value attributable to his expenditure or the depreciation in value attri-

butable to such act shall be taken into account in assessing the compensation payable in respect of such interest.

7. In determining the amount of compensation the arbitration tribunal shall also take into account the amount (if any) of any compensation paid or other payment received in respect of the previous occupation of the land so far as such compensation or payment was payable in respect of matters other than the mesne profits of the land.

8. Where the surface of the land is acquired without the mines and minerals lying thereunder, the provisions of sections seventy-seven to eighty-five of the Railways Clauses Consolidation Act, 1845, shall apply subject to this modification, that for the purpose of section seventy-eight of that Act "prescribed" shall mean "prescribed by the arbitration tribunal."

9. Where by reason of the erection, construction, or making of any such buildings, works, or improvements as aforesaid or the maintenance thereof, or by reason of the user of the land, any interest in the land has become or might become forfeited or liable to forfeiture, the compensation shall be determined as if no such forfeiture or liability to forfeiture had arisen or might arise.

10. The Lord Chancellor may make rules fixing a scale of costs to be applicable on an arbitration under this Act, and the arbitration tribunal may, notwithstanding anything in the Lands Clauses Acts, determine the amount of costs, and shall have power to disallow as costs in the arbitration the cost of any witness whom they consider to have been called unnecessarily, and any other costs which they consider to have been caused or incurred unnecessarily, and, if they think the circumstances such as to justify them in so doing, to order that each of the parties shall bear their own costs.

11. There may be contained in the award of the arbitration tribunal a finding that the claimant, after having been requested in writing by the department by whom the

land or interest therein is to be acquired so to do, has failed to deliver to such department within a reasonable time a statement in writing of the amount claimed, together with any information in his possession which may be reasonably required to enable such department to make a proper offer, and, where such a finding is contained in the award, the provisions of the Lands Clauses Acts as to costs of arbitrations shall apply as if such department had offered the same sum or a greater sum than that found to be due by the award:

Provided that this provision shall not apply unless the written request for information contained a notice of the effect of this provision.

12. The provisions of this Schedule shall apply to Scotland, subject to the following modifications:—

- (A) For the reference to mesne profits there shall be substituted a reference to profits;
- (B) For the reference to sections seventy-seven to eighty-five of the Railways Clauses Consolidation Act, 1845, there shall be substituted a reference to sections seventy to seventy-eight of the Railways Clauses Consolidation (Scotland) Act, 1845, and for the reference to section seventy-eight of the former Act there shall be substituted a reference to section seventy-one of the latter Act;
- (C) "The Court of Session" and "Act of Sederunt" shall be substituted for "the Lord Chancellor" and "rules" respectively.

13. The provisions of this Schedule shall apply to Ireland, with the substitution of a reference to the Lord Chancellor of Ireland for the reference to the Lord Chancellor.

This Schedule appears to be quite clear except perhaps paragraph 6(c). In what way has the appreciation or depreciation caused to the value of the land, attri-

butable to buildings erected by the owner or to his expenditure upon the land, to be taken into account? It must be assumed that he will be paid the value attributable to his improvements, and that depreciation caused by him will be ignored as in that way only will he be dealt with fairly.

Mr. HOWARD MARTIN (Past-President) said he felt sure he expressed the feeling of all present in proposing a very hearty vote of thanks to Mr. Savill for his most useful Paper. The Act in question was of considerable importance, and it was very desirable that all surveyors should know something of its provisions, as it would before very long become of practical interest. Mr. Savill had given a clear and detailed account of the provisions of the Act, and a very acute and far-seeing explanation of the possible dangers and pitfalls in applying it. Perhaps it would not be out of place to remind them that more than two years ago Mr. Savill had contributed another valuable Paper to the *Transactions* of The Institution—on our Wheat Supply—in which he had given them some valuable suggestions and important warnings which had been proved by subsequent events to have been more than justified.

He thought that they would all agree with Mr. Savill in the view that the Act under discussion was on the whole a successful attempt to deal fairly with the problem presented to its promoters. They had before them a difficult problem—that of enabling the State to acquire land for State purposes at a reasonable price without doing injustice to the persons interested in the land. They might have been considerably influenced by the great outcry which had been raised against the provisions of the Lands Clauses Acts, generally by

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people who thought that persons interested in land ought to be deprived of their property on unfair terms because they owned land, and it was satisfactory that the framers of the Act had not allowed themselves to be deflected from the paths of justice by that outcry, but had—as they would all agree—framed what was, on the whole, a just and fair measure. If the Council of The Surveyors' Institution, as Mr. Savill suggested, had assisted in securing that end, they must all feel proud of its work. On one point in particular, all who were interested in keeping up the standard of fair dealings between the State and individuals might be congratulated, *i.e.*, that there had been no attempt in the Act to upset the fair standard of value for purchase under compulsory powers, which was the standard of value to the owner.

It must be obvious to every fair-minded person that if anybody sold anything he had to offer at less than its value to himself, he lost the difference of value between what he got and what it was worth to himself; therefore if he were compelled to sell anything for less than the value to himself that difference in value was actually confiscated; and if land were bought for a public improvement on such terms, he was compelled in that way to contribute more to the cost of that public improvement, because he happened to own the land which was required, than any other taxpayer or ratepayer in the country. It was difficult for him to understand how anyone could hold that the power to confiscate part of a man's property like that could be just as between the State and the individual, or as between individuals; and after a long experience of acquiring land under compulsory powers, he could say honestly he had never known a case in which the standard referred to had proved to be

unfair. He had known many cases in which advantage had been taken of it to make inflated claims—and inflated claims had been and would be made under any system that could be devised—but the remedy was not to establish unjust standards of value, but to take care that the tribunal before which the claims were settled was competent.

The author had pointed out that there was no provision in the Act for persons interested in the land to be heard in opposition to an application for extension of the time of occupation by a Government department, and influenced, he supposed, by the fact that one could hardly regard it as fair for such an application to be decided on an *ex parte* statement, Mr. Savill was of opinion that it was intended that such parties would be allowed to be heard. He (Mr. Howard Martin) was very much afraid that it was not so. He spoke as a layman, but in other parts of the Act he observed the sections providing for other applications to the Commissioners and to the Board of Agriculture distinctly stated that parties interested were to be heard before the applications were decided. He believed it was a maxim of law that when, in an Act of Parliament, provision was made in some cases for such things as the hearing of parties on both sides, and in other cases no provision at all was made, it meant that where such special provision was not made, the parties would not be permitted to be heard. That, however, was a lawyer's question, and he made the suggestion only for what it was worth.

He did not know enough of the relations of Government departments to judge whether it was impossible for one authority to deal with matters which trench upon the province of other departments, and for those whose provinces were encroached upon merely to have

the opportunity of stating their views. If it were possible to do so, it was a great pity that the Act should provide for three public authorities—the Railway and Canal Commission, the Board of Agriculture and Fisheries, and the Local Government Board—to have the decision of certain matters arising under the Act. If it had been possible—it might have been impossible—to leave the decision of all applications to the Railway and Canal Commission, and to allow all the Government departments whose manors were poached on to appear at the hearing of the applications and to express their views, it might have saved a good deal of delay and expense in getting these points decided.

Mr. Savill gave them a very valuable warning as to the importance of getting questions of compensation under the original Defence of the Realm Act either settled or definitely agreed to be carried forward before the occupation under this Act began. He was inclined to think, again speaking as a layman, that there was nothing to prevent compensation under the original Defence of the Realm Act being claimed, even if the subsequent occupation under the 1916 Act had begun: but it certainly was not a risk which one would be wise to run. It would be more satisfactory for everybody whose land was occupied during the war under the old Act to have a very distinct understanding about fixing compensation before occupation under the new Act began.

Mr. Savill also pointed out with great acuteness that there was nothing in the Act to compel a Government department to give any notice of the time when it proposed to terminate occupation. It might be exceedingly inconvenient for persons interested in the land to have the occupation of the Government department

extended for an indefinite period, and then, perhaps, terminated without any notice at all. It might involve a great deal of inconvenience and a great deal of loss.

As regards the closing of highways and the compensation to be paid to persons whose lands adjoin highways, he could not see that the Act in reality limited the payment of compensation in the way suggested in the Paper. Mr. Savill thought, and was more likely to be right than himself, that it would not be payable for any period less than twelve months after the war. He, however, would rather have thought that any compensation payable for the closing of a highway would in many cases have been claimable under the original Act, and that under the 1916 Act the words "so closed" merely defined the highway and not the term for which the highway was closed. There, again, it was a question for lawyers, to whom he made these humble and diffident suggestions.

One point in the Act he thought might have been improved, and that was, the Act empowered the department to take a part of a factory or building if it were proved that no material detriment was caused by their so taking a part. That was a clause with which they were all familiar in the working of the modern railway and other Acts for public improvements, but in such cases the tribunal which decided the compensation decided also whether material detriment would be caused by taking a part only; the decision of both questions took place generally at the same hearing, and having decided whether or not material detriment was caused by the taking of a part, the same tribunal went on at once to hear the claim for compensation for the part or the whole as the case might be. The Act under review, however, provided that the Commission was to decide

whether material detriment was caused by the taking of a part, and the result of that would be that either claimants must give up the advantage of having the case settled by a single arbitrator or incur the expense of a double inquiry—one before the Commission to consider whether there had been material detriment by the taking of a part, and the other before a single arbitrator to determine the amount of compensation for what was taken, either the whole or a part as the case might be. He did not think that could have been intended by the Act; it was a practical disadvantage, and one which might easily be corrected hereafter.

As regards the compulsory acquisition of land, a Government department could under Section 4 (*a*) acquire compulsorily land in its possession and the rights required for its proper enjoyment at any time within three years after the war; but land on which buildings had been erected wholly or in part at the expense of the State could only be acquired within twelve months by the Admiralty, War Office, or Ministry of Munitions; and no owner had power to pull down, alter, or improve any of the buildings, works, &c., erected wholly or partly at the expense of the State during the period in which the power of acquisition existed; a provision which might be the cause of considerable hardship. It was not always easy to get a Government department to tell private individuals what it proposed to do in the future; and an owner might have his property locked up for one or three years, as the case might be, not knowing and not able to find out whether he would be able to pull down the buildings, or alter, or deal with them in any way, and he might thus lose valuable opportunities of dealing with his property after the war. If that were intended, then it ought to be a ground of

compensation. They all hoped that when the war was over there would be trade which might be captured from the Germans. Such manufacturing trades ought to be in full blast in the country as soon after the declaration of peace as possible, and there would be a very considerable demand for buildings in which they could be carried on. It might be of considerable disadvantage to people interested in various sites to have to wait for from one to three years before they could know whether the buildings could be used, or whether the Government meant to acquire them.

As regards the standard of value, there was one point in the Act which was of some interest. The Schedule provided that the value was to be taken as "at the date of the notice to treat." That was according to the practices under the old Lands Clauses Consolidation Act; but the date of the notice to treat probably would be a time at which the land was still suffering under depression of value caused by the war. It was true that the value of the land was to be taken into account as in the condition it was in before the war; but in some cases it might seem a little hard that just when depression was passing away, and the use of land for trade purposes was becoming general, and the demand was rising rapidly, anyone should have to part with his land at the depreciated value existing during the course of the war. He did not know that it was possible to avoid that. The date of the notice to treat was a sort of time-honoured period at which value ought to be assessed, but at the same time he really thought that the particular provision might possibly cause some hardship. He had much pleasure, and was sure that everyone present would agree with him, in moving the most hearty vote of thanks to Mr. Savill for his valuable Paper.

Mr. CUTHBERT LAKE (Fellow) had great pleasure in seconding the vote of thanks. The whole Act and the Paper also were matters upon which The Institution could congratulate itself. They had to thank the author for one of the shrewdest and most workmanlike Papers which had been before the Members for a long time. Mr. Savill always stuck to his point, and it was a businesslike Paper entirely—there was nothing but business in it.

He thought that it was a matter of great satisfaction to know that at last their professional Institution had been consulted on a matter relating to their professional work, and one could only hope that the precedent would be continued. He would like to add that they also had to congratulate themselves that the taking of land for war purposes was being carried out by men most of whom were Members of The Institution.

Referring to the power of the Government department to give up possession of the land at any time without notice, that seemed to him to be a pitfall which claim forms in the case of lands and buildings taken by the department drew attention to, and he would have thought that in every case provision would be made for something in the shape of notice to be given at the end of the time. He had raised the point in his own cases, and it had at once been met without any question in a manner which he had always considered fair, by providing for a period of notice and for damages in some special form at the end of the term.

As regards Section 3 (2) there was a doubt expressed as to whether the notice to treat was to include adjoining land belonging to the same owner, and, if so, whether it had to be the subject of a preliminary inquiry, or be dealt with at the hearing of the case for

the acquisition of the land in the occupation of the department. He took it to be that there would be no preliminary inquiry; one must consider that in war an individual had no right as against the Government when the Government had to take action for the good of the State, so that he had no rights which would enable him to delay the action of the Government. Anything which had to be done could be done immediately, and compensation be paid afterwards.

Referring to Section 5, the author assumed that on all questions of user after sale, or leasing by the Government, the original owner would be free to take action without consideration of the provisions of the Act; that, he understood, would be the position in connection with restrictions of user. It appeared to him just to revive the old conditions. The land had been taken by the State in war time to meet an emergency, and protective restrictions had been abolished; later, when again sold by the State, if they were not revived, there would inevitably be hardship to the adjoining owners, who, though they might be content to suffer loss or inconvenience from the State in war time, would hardly be content to suffer from the acts of private individuals who had bought from the State.

In regard to claims under the Defence of the Realm Act generally, it appeared to him that it would be useful where claims were agreed if a certified copy could be obtained from the department, so that the certified copy with the acceptance of the claim would together form evidence of the contract. It would be particularly convenient in cases where the claim was on behalf of a person holding a lease, or interest other than as a freeholder, who, for the satisfaction of his superior landlord, had to produce some evidence of the

conditions under which the property was being held. In matters of insurance it had been somewhat difficult to show to the superior landlord where and how the property was insured against fire or air craft, &c., and it would facilitate matters if the claimant were able to produce the certified copy of his claim and the acceptance.

He wished to bear tribute to the excellence of the Paper, and it was with great pleasure he seconded the vote of thanks.

Mr. WILLIAM ALLEN (Visitor) took the opportunity of congratulating Mr. Savill on the very clear exposition that he had given of the clauses of the Act in question, one which, he might say, was a brave exposition, because it took a brave man to throw into his own language a complicated Act of Parliament like the one under discussion. The Paper had certainly made the Act clear, and showed them exactly what were the author's views on its provisions.

He was rather struck with one remark that Mr. Howard Martin made as to the duplication of authorities under the Act, and, for his own part, he quite agreed with it. He thought that in Section 8 the framers of the Act might have possibly fallen into some difficulty in regard to tribunals. It certainly was a wise thing, as far as value went, to allow the findings of value to be in the hands of experts who could appreciate the evidence that was brought before them. But the Railway and Canal Commission, in nearly all matters under the Act, were the final authority in respect of appeals from the referees appointed in the same way as those under the 1910 Finance Act, and he thought that it was very unfortunate that they were not made the final authority

in respect of any appeals on points of law that might arise on the decisions of a single arbitrator. It seemed to him to be quite clear that, under the Act, if a single arbitrator had to state a case in respect of any of his findings, that the appeal on the stated case—the point was noted in the Paper—would be to the High Court, while all other questions of value under the Act or relating to value would be settled by the Finance Act referees or by the Railway and Canal Commission. Of course the Railway and Canal Commission also settled questions of law, and there would be no appeal from their decision except to the Court of Appeal; but the other referees' decisions would go to another tribunal altogether, and one not at all accustomed to dealing with questions under the Act. He would suggest that it might be a point that The Institution should bring before the authorities, and obtain, if possible, the introduction of some small amendment, so as to make an appeal from the single arbitrator the same as an appeal from the referees appointed under the Finance Act.

He was not sure whether a single arbitrator would often be chosen, because if a referee were chosen it was fairly clear that the Government would pay his charges just as was done under the Finance Act; and of course there would be no charge other than the ordinary fees if the person went to the Railway and Canal Commission to determine value; but if a single arbitrator were chosen under the Act, it appeared that he would be entitled to the usual fees as an arbitrator, which would put the parties to additional expense, which they would not incur if they went to the other tribunals to determine value. That undoubtedly was a point which would be taken into consideration by persons who invoked the provisions of the Act.

In the whole Paper there was only one point with which he seriously disagreed, and that was where the author said he did not think that regard would be had to any depreciation caused by an act of the owner. He was afraid he hardly followed the reasoning, because in the wording of paragraph 6 (c) in the Schedule there was an express direction—whether it be just or not he did not know—that the arbitrator, in fixing the compensation to be paid, should have regard to any act of the owner by which the land had been depreciated. That appeared to him to be only reasonable, as on the one hand the owner was to benefit by the increased value due to anything he had done, and so on the other hand it appeared right that if he had done anything to depreciate the value, there should be some lessening of the compensation that was paid to him.

The whole of the Paper was an exceedingly fair one, but he would like to know the explanation of the author's views in respect of that particular section.

Mr. FRANK W. HUNT (Fellow) said he desired to endorse all that had been said on the usefulness of the Paper. He thought that it was a pity that the author had resisted the temptation, as stated in the preamble of the Paper, of going into the history of the Act, or, at any rate, of the proceedings in the House, and of explaining that the Act was, as it were, an addendum to the provisions for the Defence of the Realm Regulations and the practice under the Defence of the Realm Losses Commission.

Two years ago in the President's Address the Council of The Institution had before them some indication of how such practice in connection with the war differed

from the practice at the time of the Napoleonic wars. In those days property taken was apparently always subject to compensation, but now the Defence of the Realm Regulations empowered a competent authority to take any property required for the Defence of the Realm without recognising any legal right to compensation whatsoever; and the only way in which owners whose property was so taken could obtain any recompense for being deprived of the use and occupation of their property was by making a claim before the Losses Commission, who had been instructed to inquire, and determine, and report in cases not otherwise provided for, what sum ought in reason and fairness to be paid out of public funds, which powers, under the Defence of the Realm Act, were, it seemed, limited by inference to the period of the war. The Act they had been considering that evening was introduced to provide for the conditions which would obtain immediately after the powers under the Defence of the Realm Regulations came to an end, and they would have observed that the Act itself was divided into two portions, one as to detention and one as to compulsory purchase, and no doubt the consideration of the two things could be kept quite distinct.

The author appeared to have a profound distrust of the public official, and to think that he would take an unfair advantage of an owner, and could not be expected to act with any degree of common-sense. He could himself hardly imagine any official omitting to inform an owner, as soon as reasonably could be done, when a decision had been arrived at that lands were no longer needed for the purposes of the State, so that the owner without any doubt in his mind could deal with them as he wished. And he believed much of the difficulty, anticipated on that score, would disappear

when they got to the problems with which the Act was intended to deal.

After these observations on the Paper generally, he would deal more particularly with the sections of the Act. The first which he would touch upon, Section 5, provided for the State disposing of property which might have been acquired compulsorily, it being no longer required for public purposes. That power obviously raised considerable difficulties, and in order to protect an owner as far as possible, there was embodied in the section the right of pre-emption, as they understood it, under the Lands Clauses Act. It was rather an inversion of the practice of recent years, because most promoters had been doing their best to get relieved of the obligation in respect of land acquired by them which might become surplus under the terms of the Act. Under the Act the State, before offering the property elsewhere, must give the persons owning the estate, or their successors, the option to purchase, or, if they failed to exercise it, must offer it to the adjoining owners. This right of pre-emption was limited to cases where no permanent buildings had been erected, but having regard to the explanations given during the progress of the Bill through the House, there would be very little land falling within the scope of the right of pre-emption. He was doubtful if he agreed with the observations on Section 5, where it was said that the provisions of Schedule 6 would apply in determining the price to be paid by the owner.

It was apparent to his mind that Section 6 of the Schedule could not apply because it dealt with matters entirely different. He suggested that it referred to the price that an owner would give for the property should he exercise the right of pre-emption ; but in turn it dealt

with compensation, and also with matters which it seemed to him could not arise in the event of a sale of property after certain works had been carried out, the property being there as an entity, to be purchased if the owner desired to purchase it.

The other section to which he would refer was Section 9 : "Until Parliament otherwise determines all "compensation and purchase money" shall be defrayed out of money provided by the Government. The section, of course, provided the authority for finding the purchase money, and it was referred to during the discussions in the House as showing that Parliament would not lose its control over public authorities wishing to acquire property. Fear was expressed that public departments would run wild, acquiring property everywhere altogether apart from the consideration of public need, and the provision was pointed to as preventing purchases being made except out of funds provided by Parliament, and as checking any tendency to acquire unnecessary property.

He supported most heartily the vote of thanks to Mr. Savill.

The PRESIDENT said that, having regard to the very exceptional interest of the Paper which Mr. Savill had been good enough to read to The Institution, and the additional interest given to it by the speeches to which they had listened, it appeared to some Members of the Council that it would not be well to curtail the interesting discussion by closing it that evening, more especially as they had some hope that Lord Parmoor, whom they all remembered as that distinguished lawyer Sir Alfred Cripps, and possibly Mr. Horne and other prominent Members of The Institution who were not able to be

present that evening, might like to take part in the discussion. Therefore he proposed that the debate should be adjourned until the Meeting on the 12th March, and he was sure that whoever was fortunate enough to be present then would enjoy the continued debate.

The vote of thanks having been put to the Meeting and carried unanimously,

Mr. EDWIN SAVILL, in acknowledgment, thanked the Members for coming, and for the vote of thanks for his Paper. In having read the driest Paper those walls had ever listened to he might claim to have created a record. At the next Meeting he would have pleasure in replying on the points raised in the discussion.

The proceedings then stood adjourned.

AT

THE ORDINARY GENERAL MEETING,

Held on Monday, 12th March, 1917.

GEORGE FRANCIS STEWART (President) in the Chair.

The adjourned discussion on the Paper read at the Ordinary General Meeting of The Surveyors' Institution on Monday, February 12th, 1917, by Mr. Edwin Savill, entitled "Some Notes on the Defence of the Realm (Acquisition of Land) Act, 1916," was resumed by—

LORD PARMOOR (Hon. Member), who regretted that he was not able to hear Mr. Savill's Paper, but had had the advantage of reading in the *Transactions* the Paper and also the discussion. He would like to add his testimony to what had already been said in regard to the thorough and exhaustive method with which Mr. Savill had dealt with this somewhat difficult Act.

Some of the generalisations were somewhat too wide. For instance, it was said that the Paper was one of the driest on record. He thought that was rather extravagant considering that the Paper dealt with a matter which must and ought to be of interest to all Members of The Surveyors' Institution.

He did not propose to approach Mr. Savill's Paper by going into matters of detail for two reasons. First of all, there would hardly be time to do so, and secondly,

because some of the important problems to which Mr. Savill had referred might by and by come up to a higher place for judicial interpretation, and therefore he wished to avoid going into any such questions on the present occasion.

The Institution was really the expert guardian of what was fair and right in the matter of compensation, and it was of the greatest importance that it should take up a strong attitude in matters of that kind.

It was the first principle of security, as regarded rights amongst civilised people, that if a man's property were taken for public or national purposes, he should be fully indemnified as owner. He had noticed that there was sometimes a kind of suggestion that compensation in such cases was a kind of privilege of the landowner. It was, however, nothing of the kind. What was done was that his land was taken from him for national purposes, and it was in accordance with the first principles of equity that he should have an indemnity. There was the case, they would remember, of Naboth's vineyard. Money as compensation was to be given to Naboth, or a better vineyard, and he supposed the only criticism they would make would be that Naboth was not entitled to a better vineyard, but should only have had one as good as that taken away. The point he desired to make quite clear was that compensation or indemnity was a matter of right, guided by the first principles of civilised society. They were no doubt aware that the Courts of Law presumed compensation to be given wherever private rights were interfered with. He thought that was only proper and right.

In regard to the basis or principle of what was called *equality*, he supposed they would all consider that in regard to money necessary for national purposes we

should, as far as possible, be subject to equal sacrifice, and, according to our means, subscribe in fairly equal proportion. That could not be done unless a man whose land was taken was compensated. By that he was placed on the same level as his fellow-citizens, and when that had been done he ought to contribute, and did contribute, equally with them; but if they did not provide him with a fair measure of compensation, it was clear that, so far from being taxed on an equal footing with other subjects, he had to bear an unequal burden of the cost so far as his own land was concerned.

The principle of security and equality that he would like to lay down in the matter of proprietary rights was that an owner, when his land was taken for public purposes, should be fairly and properly indemnified. It was not necessary for him to say, in an assembly such as the present, that the ordinary code laid down to carry out that principle was that contained in the Lands Clauses Act, which Act had been copied in various parts of the world as being in its essence a fair measure. Of course an Act of Parliament was open to reform, particularly in the matter of procedure, but the essence and substance of the Act had been accepted as a fair example of what the law of compensation should be. He noticed that Mr. Howard Martin referred to it as having initiated for all time the principle of indemnity based upon the value to the owner. He thought that the Act did not initiate that principle; but it was an accumulation of experience obtained from a large number of clauses in private Bills to which the principle had been properly applied, with the result that the Act was founded on the full knowledge of the principle that ought to be applied, and had therefore stood the test in a wonderful way ever since.

He might perhaps be allowed to deal with the history of the Acquisition of Land Act rather than with its details. Mr. Savill had said he would not deal with its history, but rather with the provisions themselves. When the Act came up to the House of Lords from the House of Commons he was bound to say it was in a very unsatisfactory condition, and in confirmation of that he might say when the Act left the House of Lords it was practically transformed, not only in detail but in matters of principle. It was transformed, he thought, in the right way by the Upper House, after many consultations between those in charge of the Bill and those who wished to see it put in fair shape, and nearly all the amendments were accepted after full consultation and with the assent of all parties. To have an Act of this kind put on a fair basis was a very important matter. They ought to get rid of the political party element, and try to approach the matter from a fair, common-sense, and legal standard.

He would mention several points on the way the Act had been altered for the better. The first which seemed to him to call for comment was that, as regarded the first section, there was a period of uncertainty during which a landowner, or tenant, might be put in a difficult position by not knowing what the attitude of the Government was going to be as to continuing in occupation, and on that point he had received a number of letters, and had himself proposed amendments to the Bill. His colleagues in the House of Lords had adopted the same attitude as that which every owner in this country had adopted, of putting no obstacle in the way of the Government's demands at a time of national crisis. They felt it was a very real matter of moment, and no merely technical objections were put forward.

Take the position of a tenant in the following circumstances : A large and very vital portion of a man's farm had been taken, and assume for the purpose that the war was over—for the Act in this respect would not come into operation till then. It would be of the greatest importance to the man to know whether he was going to be left in possession of the holding or not. What the House of Lords had done was to curtail the time within which the Government had to make their selection, whether they should take the land over after a period or give it back to the owner. He still thought the time allowed was full, but he was certain that it was only right and fair that the Government should make the choice within reasonable time and without unreasonable delay.

When the Bill came up from the House of Commons it, in many respects, deviated from the principle contained in the Lands Clauses Act. They had tried, in the House of Lords, to introduce what they considered to be the right principle—the Lands Clauses Act principle, because they felt that where a man had given up his rights for national war purposes, he ought not to have a less measure of fair treatment than when land was taken in the ordinary way. Many had set to work to bring the Act, as far as possible, into strict accord with the Lands Clauses Act, and amendments were specially introduced in order to make sure that compensation was given for what they knew as “injuriously affecting.”

That was, of course, a very proper subject for compensation, particularly when lands might be used for noxious trades. What happened with regard to that was that although they had thought the matter was settled, their amendments were struck out when the Act

went down to the House of Commons, on the ground that it was not intended to give compensation in the case of land injuriously affected. It came back to the Upper House in that state; but Lord Buckmaster, who had great knowledge of such matters, said, in spite of the alteration in the House of Commons, he thought owners of land which had been injuriously affected would still have compensation. But what could be worse, when drafting a measure of this kind, than that when a clause had been agreed with the Lord Chancellor—(and all legal authorities acknowledged this law of compensation)—one of the most crucial provisions should be struck out on its going back to the Lower House? That was not the way in which a Bill of that kind, dealing with rights of that character, ought to be dealt with, but he gave that as an illustration of what actually had happened.

His next objection (and he might almost place them under one head) was that if it were the intention, and he assumed it was—at any rate it was a statement made in connection with this Bill—to apply the Lands Clauses Act, why should not it be applied directly? The provisions of the Lands Clauses Act, he supposed, every surveyor knew, if not by heart, at least very intimately.

The legal principles involved in the Lands Clauses Act had been settled by a series of decisions of various eminent judges. It was an Act that was understood and interpreted, and it was of importance not to introduce unnecessary trouble and expense in a matter of this kind. What was the effect of the language used? He had read Mr. Savill's Paper with the greatest care; but what it came to seemed to be that "We have got a number of additional clauses and sections. I will try to help you, but I cannot tell you whether I am right

“or wrong.” That way of dealing with settled principles of proprietary right was open to great criticism, and he had tried to say—but it was not effective—“If “you are really in favour of the old principles, say “so quite clearly and merely apply the Lands Clauses “Act.”

There was another matter which he thought very seriously affected the Members of The Institution. He regarded The Institution, as he had said at the outset, as an expert body whose knowledge of matters of this kind kept them on right lines. When he first examined the Bill he naturally looked to find by what body compensation would be assessed, and he had hoped to find that in 999 cases out of 1,000 that it would be by experts chosen from that Institution, who if they did not agree would get a third expert to settle the matter. But he found when the Bill first came up to the House of Lords that, with some exceptions, the owner had no option in the matter if the Government chose to oppose him, and the body appointed to determine matters in dispute was the Railway Commission. He did not want to abuse the Railway Commission, where in his early life he had spent many not uncomfortable days, but they had no expert knowledge of the question of land valuation. So there was a laboured procedure by which they might call to their aid expert advisers on land valuation. He had tried to get rid of the Railway Commission and to put Members of The Institution in their place.

He had hoped that, except perhaps in a few cases, a system of valuation would be adopted which would be fair and cheap, which would be in the interest of all parties, particularly the landowner, because the landowner had not a bottomless purse like the Government. But he thought that an owner would have to go through

a most costly inquiry before a tribunal which had to be instructed in expert knowledge, whereas an expert opinion to fix compensation at a not undue amount ought to have been got first hand from surveyors themselves.

There was another curious clause in the Bill, when it came up to the House of Lords, which, no doubt, many of them were familiar with. What were called users of premises taken by the Government were absolved from all responsibility in regard to pollution and matters of that kind. That had now been set right, though it took a long time to negotiate it, and it stood now in this way: if a private individual was injured by pollution, it was true he could not stop it, but he could get compensation.

As regarded the general local Acts that were passed in order that rivers in manufacturing centres should not be polluted, the Government users were to be subject to liability to injunction, and so on, if they polluted rivers in the course of their business, and it was quite right that they were not to be allowed to be put in a privileged position. They had had a hard fight over the point. The promoters of the Bill wanted the Government user to be above all law. He said, "If I am above all law, I can produce good results, or make a little more for myself." That was a bad principle, more especially so when bureaucratic action was growing in connection with the occupation of Government property.

There was another very curious clause to which a good deal of attention was paid. It was known that the Government had constructed many buildings not in accord with the requirements of local Acts, and the question arose, On whom should the liability fall? The owner would be liable to make the property comply with

the by-laws if called on to do so, and would be subject to a heavy penalty daily during the time he was unable to comply with the requirements of the local authority. That meant that there was to be a heavy liability on the owner for a difficulty not due to him, but to the Government! One suggestion was that the Government should put the matter right themselves. Another was that it should be left to the owner, who would merely have his rights under one of the earlier clauses, but would be subject to a penalty in respect of which he could not get compensation. He was glad to say that kind of vicarious penalty was taken out, after much consideration, in the House of Lords.

Another clause they did not succeed in amending—Mr. Savill had referred to it also—was that from the Bill it was very difficult to know what Government departments they might have to deal with; delay was caused by Government departments overlapping, and they proposed therefore one Government department should be responsible in order that, if any one wanted to get fair treatment in regard to land, he should know where to go for it. That seemed to be reasonable in itself, and it would have avoided a good deal of difficulty; but the Government departments would not make that concession. They seemed to think that overlapping was desirable. An illustration of the difficulty that might arise from that, could be found in the Schedule attached to the Act, in which were certain changes to the Lands Clauses Act procedure. Amongst those changes was one of an exceptional kind. Many of those present had realised in practice the difficulty of dealing with the mines and minerals clauses of the Railways Clauses Act, especially when compensation had to be fixed for mines and minerals not taken under the Lands Clauses Act.

When this Schedule arrived from the House of Commons it was, so far as mines and minerals clauses were concerned, not to be founded on a definite principle—but what the Railway Commission, from time to time, liked to make it. How could property be dealt with under such conditions? But the amendment made was a fair and reasonable one. The general law was not to be altered except in what was called prescribed distance, which, as they would know, presented great difficulties, and some of the deeper mines might be altered in particular cases; that, to his mind, would not produce difficulty, and he thought it was an amendment which was good.

They would see, he hoped from what he had said, that the Upper House of Legislature, even in its crippled form, did something towards putting the Act on a fair and understandable basis. That it was all understandable they did not profess, but it was so as compared with the hopeless muddle in which it arrived in the Upper House.

He would say, on behalf of the House of Lords, that if there was one duty they performed, and ought to perform, it was to see that, in matters of legislation of this kind, an Act was at least framed, as far as possible, in proper, direct, and intelligible language. That as regarded legislation was a very important matter.

In conclusion, and speaking as having the honour of being an Honorary Member of The Institution, he did hope they would always take a specially independent attitude in asserting what they thought to be right in every matter of this kind. He was bound to say that he saw dangers ahead, derived from sources known to all of them; but the answer to the danger was this, that they were

a specialised body for dealing with these questions, and as such they should insist on making their voice heard as experts, and then they might look without much apprehension to the future. They were always finding the opinion of people with special knowledge being attacked by what was sometimes called the democratic spirit. That was the general spirit of ignorance against the specialised knowledge of a body.

He hoped The Institution would always maintain its position firmly but wisely, and that its voice might be heard. He was glad to see that this matter had been submitted to the Council of The Institution, and no doubt that had gone a long way towards solving difficulties. When Bills were in the House of Commons they were sometimes subject to special influences, and he hoped they would agree with him that the House of Lords did their duty in trying to put the Act into proper form and on a right basis as regarded principle.

The PRESIDENT said that he had to apologise for the absence of Mr. Edgar Horne, who had taken a very active part with regard to the Act they were discussing when it was before Parliament. Mr. Horne had fully intended to address them that evening, but unfortunately he was prevented by illness from being present. He was sure they would regret Mr. Horne's absence that evening, and wish him a speedy recovery.

Mr. ARTHUR VERNON (Past-President) said they were all sorry that Mr. Horne was prevented by illness from being present that evening. Had he been present they might have heard how it happened that the Bill was sent up to the House of Lords in such an unsatisfactory condition. Might he express the gratitude which

Members of The Institution felt on those rare occasions when, as had been the case that evening, distinguished Honorary Members visited them.

He had read the Act very carefully, and his first feeling, as a layman, was that there had been an attempt to do justice to the subject. He then read it again, in the light of criticism, and came to the conclusion that there would be a great deal of difficulty, and that it might have been much better. He next tried to understand it, and entirely failed. He failed because he found that there were fifteen other Acts of Parliament incorporated with it, which must be read and understood, and to which one must have access before it would be possible to determine what the effect of the various provisions would be.

He was quite sure that those present representing The Surveyors' Institution, and those representing the various interests concerned, had approached the matter from two distinct points, but which, however, were common to both. First of all, that they were bound as patriots to assist the Government in every way in their power, and therefore they were quite prepared to do their best to make the Act work freely. Secondly, that all those who might have occasion to appeal to arbitration under the Act would commend the provision that the nomination of the panel was left to the President of The Institution with two legal colleagues.

At the same time there were many points on which they were grateful to Mr. Savill for having drawn attention to the difficulties likely to arise in the future.

He thought the greatest insult which the Legislature could throw upon the—should he call them?—the taxpayers of the country, was to give them a mass of difficult, undigested, unexplainable, and incomprehen-

sible legislation. There was a time when they had Acts which were landmarks of legislation, which were, he might say, almost perfect legislation. The Highways Act was one, the Lands Clauses Act and the Public Health Acts were others which were monuments of legislative care.

This Act under consideration, however, would always give a great amount of trouble. Until it had been tested by the various Courts nobody could say what a good many of the provisions actually meant.

There were one or two points to which, as they were before him, he would refer. First, if they would look at the Paper they would see that the word *rent* was used. He was afraid that it was a feature of the Defence of the Realm Act that in some cases *rent* seemed to have a varied meaning, and in other cases no meaning at all; and a great many young officers, some from their own Institution, had been instructed to settle the question what the real meaning of *rent* was, not, as had many times been defined in the past, as *rent* either to the purchaser, or to the seller, or in the open market, but on the principle that it meant the loss to the person from whom the Government had taken the particular property, a principle that presented all sorts of difficulties for the future. However, he was hopeful now, after the interview they had had recently with the body of whom the Chief Director was present, that most of the difficulties would shortly be removed.

Lord Parmoor had referred to the case of land being taken by the Government through an estate, thereby cutting it up and making important severances. Unless all these cases were fairly treated, as they thought was the case under the Lands Clauses Acts, confusion, injustice, and trouble were certain to result. Other points

had been touched, and he could say for them all that they would try to interpret this Act to the best of their ability; that they really did desire to bring exact and expert knowledge to bear on this special subject; and that all those who helped the State by patriotic effort should be fairly and adequately treated. If sacrifices were to be made, then as far as possible they should be universal and equal: a sacrifice by all parties, and not specially on the part of the property-owning portion of the public.

Mr. R. C. DODDS (Visitor) said that, as Acting Secretary of the Land Agents' Society, he wished to thank the President and Council of The Institution for the opportunity given him of listening to Mr. Savill's most interesting Paper and of following the discussion. His society had taken the greatest interest in the Bill during its passage through Parliament, and took some little credit to itself for getting, with Lord Parmoor's assistance, some modifications made in favour of the landowners' interests.

There was one section, however, which appeared to be a great hardship—Lord Parmoor had referred to it—it was the building by-laws section. As Lord Parmoor had stated, he had been successful in obtaining the deletion of the penalty clause, but the Land Agents' Society still felt very serious apprehension as to the effect of that section on claims for compensation. Under the section the local authority had the power to enforce compliance with its by-laws in respect of a building or any other work which was left upon the land after the Government department had given up possession. There was no limit of time within which the local authorities' requirements were to be specified, and it seemed that the

claim for compensation which had to be made when the occupying department gave up possession could hardly provide for compensation in respect of alterations or removals of buildings which a local authority might require to be made at some distant period.

For instance, the section said that the requirements of the local authority were not to be enforced in a less period than two years, so that in many cases it would be impossible to formulate a claim in respect of unknown requirements. These considerations seemed to give point to Mr. Savill's comment, that owners would need to be very carefully advised if, when fixing the terms, many items of compensation were not to be omitted.

There was one other objection to the clause, and that was that the authority to whom an appeal had to be made was the Local Government Board. From a landowner's point of view it seemed unlikely that an appeal from a local authority to the Local Government Board would be of any use to the landowner. On the previous occasion Mr. Allen had, he believed, commented upon the duplication of authorities, and as the Local Government Board was referred to only in that particular section, he thought the reference might well have been omitted, or the appeal made to one of the other bodies provided by the Act.

Mr. DRYLAND HASLAM (Fellow) remarked that Lord Parmoor, in his interesting address, had spoken scathingly about the many points which were left obscure or uncertain in the Act. He was glad that his Lordship had done so, because it was just those points which made the Act difficult for those who had to deal with it later. If it were intended that certain things should

be paid for or not paid for, it was far better to state the fact clearly in the Act than leave it to be inferred afterwards from the general conditions.

There were, amongst others, three points which ought to be made clearer. If Mr. Savill were right—and generally he was right in his opinions—when he said that at the time the owner was settling terms for continuance he must bear in mind a number of matters which would affect the amount of compensation when it came to be settled, it ought to be made clear to owners that those matters should be provided for at that time, or they might find they were prohibited from taking them into consideration in the final settlement. Take the case of the Agricultural Holdings Act, ninety-nine tenants out of a hundred, when they received notice to quit—which they thought unreasonable—did not know they had to give notice within two months of their intention to claim compensation for disturbance—and so they often did not think of instructing an agent until it was too late to make a claim under the Act. In the present case owners and agents would have to be careful if they were to get the compensation to which they were entitled.

There should also be no question of assumption that the owner had the right to appear before the Commission if he wished to enter a protest against the continuance of occupation for a term beyond the conclusion of the war. It ought to be made quite clear that the owner had the right to do so.

Another point was that proper notice ought to be given by the Government department of its intention to give up the property. Generally speaking, in the cases of houses an agreement was drawn up, and proper notice was provided for; and the same principle ought to be

followed in all cases. Those three points, with some others, should be made clear.

He did not know why their old friend the 10 per cent. for compulsory sale should be struck out. In many instances it seemed to be only fair and right that the 10 per cent. should be paid.

He was indebted to Mr. Savill for the help given them by his Paper, and they were equally indebted to Lord Parmoor for the interesting information and explanations given in his address that evening.

Mr. J. H. SABIN (Member of Council), after expressing appreciation of Lord Parmoor's testimony to the patriotic acceptance by farmers of the provisions of the special legislation rendered necessary by a state of war, suggested that, in some cases at least, a little more consideration for the convenience of parties disturbed might have been shown by the acting authority.

With regard to the Act under discussion, he drew attention to one of the bases on which it appeared by the Schedule to the Act that payment for land taken was to be made. This provided that "The value of the
" land acquired shall be taken to be the value which the
" land would have had at the date of the notice to treat
" if it had remained in the condition in which it was at
" the commencement of the present war," &c. In a case which he had in mind, and which was probably not singular, the most important part of a farm, comprising one-third of a total of 600 acres, had been taken for aerodrome purposes. Of 200 acres part, it was stated, would be required permanently, and on this more or less substantial buildings had been erected. If the precise words of the Schedule were to be accepted, the compensation to be paid to the owner would be the agricultural

value of the land in 1914, when the farm was let to an old tenant at a rent under the value agreed for the provisional valuation under the Finance Act, and it was *suggested*, though not determined, that the lower value was the basis for compensation. But the farm was the most important on an estate of over 3,000 acres, and the interference with the farm and estate would be serious. The 200 acres taken already would be cut up by hard roads and severed by the retention of the area occupied by permanent erections, and it was to be hoped that the refusal of compensation for severance, distinctly applicable to buildings, would not be enforced in such a case as regarded land.

Although the tenancy of the farm was to have been changed at Lady Day, special circumstances occurred to alter the intention of the tenant, and he remained in occupation of the reduced area, but the speaker would have had great difficulty in reletting to a new tenant a farm of which he could not state the permanent area, nor how far it would be ultimately interfered with. It appeared to him that if the value were to be fixed on the basis first referred to, it was not a proper criterion of the amount the owner should receive. It was certain that the "buildings, works," &c., erected on the retained portion would depreciate the value of the estate, apart from other considerations. The crucial test was the interpretation to be placed on the latter part of the words quoted.

Mr. LESLIE R. VIGERS (Past-President) said he did not propose to enter into the discussion beyond saying that he could not follow Mr. Sabin in his difficulty of fixing the price or value of the land at the date of the notice to treat. As he understood the Act, the owner

was to receive the value of the property to him, which was the basis of compensation under the Lands Clauses Acts.

He had been most interested in reading Mr. Savill's Paper and in listening to the discussion upon it. He was much indebted to Lord Parmoor for the account of what had taken place before Parliament, more especially because, as Chairman of the Parliamentary Bills Committee of The Institution, he had taken a great interest in the proposals afterwards embodied in the Bill and in the suggestions forwarded to the Government thereon as representing the views of The Institution..

The PRESIDENT said, before he asked Mr. Savill to reply to the various points which had been raised, he was sure they would all agree that he ought to propose a vote of thanks to Lord Parmoor for his address that evening. His Lordship had remarked that the subject was extremely dry, but he was perfectly sure, speaking for himself and for those present, that what they had heard was by no means dry, but had had a salutary effect in giving life to the points which they had before them. His Lordship's address would be of great interest and enable them to understand something of the genesis and evolution of the Act. He thought that when they again read the Act, and studied cases under it, they would probably remember with both pleasure and profit the observations which Lord Parmoor had made. He would add that his Lordship was quite right in saying that a draft of the Bill had been submitted for the consideration of the Council of The Institution and that they gave it their best and closest consideration. Of course all the suggestions which they made were not adopted in their entirety, but still some of them were,

and they thought that it was both considerate and wise of the Government to allow them to see the draft Bill, and the Council of The Institution hoped that the precedent might be followed in regard to any similar measures in connection with which the professional knowledge of Members of The Institution might prove useful.

Mr. A. L. RYDE (Vice-President) seconded the vote of thanks to Lord Parmoor with very great pleasure, and said he was sure that Mr. Savill would forgive them for interposing such a motion during the discussion on his Paper. There was only one point on which he would comment, and that was Lord Parmoor's remarks to the effect that everyone in the room had the Lands Clauses Act by heart. There had been a time when they had sufficient practice in Lands Clauses Act cases to have enabled them to know the Act very nearly by heart, but he was sorry to say that that time had passed. In those days his Lordship had cross-examined him more than once at Plymouth, Liverpool, and elsewhere, but since then the Act was gradually fading from memory.

The motion having been carried with acclamation,

LORD PARMOOR, in acknowledgment, said that he remembered the time when it used to be "young Mr. Ryde" who had now come to be senior Vice-President of The Surveyors' Institution, and who, with himself, could look back on what he might call the palmier days of the Lands Clauses Acts. He was most grateful to the Members and Visitors for their vote of thanks, and, as an Honorary Member of The Institution, he would say that if at any time he could be of service to them he would gladly do whatever he was able.

Mr. EDWIN SAVILL, replying to the discussion, said he was sure that the new lights thrown upon the subject by Members and Visitors would be of the greatest service to The Institution. He was glad that he was not called upon to answer Lord Parmoor on any legal points, but, on the other hand, he felt that it would have been useful to the Members of The Institution, and perhaps would also have saved their clients expense, if they could have had Lord Parmoor's views on some of the difficult and doubtful points which had been raised. They might, for instance, have been saved from the necessity of going to the highest Court later on, whereas now he was afraid that on a good many points they would be compelled to do so. As surveyors their thanks were due to Lord Parmoor, firstly, because his Lordship had done a great deal of work for the country in the direction in which their interests lay, and secondly, because that work was for the benefit of landowners. Landowners were supposed not to be grateful for anything, but it was quite conceivable that they did not know that Lord Parmoor had taken any steps at all in the matter, and yet, but for his Lordship's intervention, landowners would, in his opinion, have been very hardly dealt with. Many points were raised in the discussion, and first he would try to deal with the one referred to by Mr. Sabin.

He thought that Mr. Sabin should, for the present, realise, when meeting a Government valuer on cases under the Act, that in all probability the Government valuer knew no more about the matter than he did himself. He was perfectly free to listen to what the Government valuer said, and was perfectly free to say what he liked himself. But Mr. Sabin should not for a moment contend that the basis of compensation was

to be the rent paid by a tenant. He could not remember that the Act anywhere laid down that basis. Paragraph 6 of the Schedule seemed to make it clear that in determining the amount of compensation the value of the land acquired should be the value which the land would have had at the date of the notice to treat if it had remained in the condition in which it was at the commencement of the present war. That could not mean rental value, it meant capital value, which the land would have had if it had not been altered in any way since the beginning of the war. It might be a difficult value to ascertain; indeed, he thought that in all probability it would be an extremely difficult one. Of course he had heard it said that it was to be rental value or based on rental value, but he could not find anything in the Act to that effect; he thought that on that point Mr. Vigers was right.

On the question of injurious affection he did not see that an owner was barred from making a claim in that respect. The Lands Clauses Act held good, and there did not appear to be any paragraph in the Schedule which varied the Lands Clauses Act or which would bar an owner from making such a claim. There were points on depreciation and appreciation, but they applied to the land which was being taken and not to other land. He thought—though speaking after a great lawyer he hardly liked expressing the opinion—that the owner would have been quite free to claim on all the heads mentioned by Mr. Sabin.

Mr. Howard Martin, who opened the discussion, considered it a very serious matter if owners could not appear before the Commissioners in certain circumstances where the evidence of a department would be *primâ facie* evidence that certain things had been done.

That was a point which he had discussed with his legal friends, some of whom thought that the owner would under another Act have the right to appear, and others of whom thought just the contrary. If it was a fact that the owner had not the right to appear, an amendment in that respect should be made at once.

Another point, mentioned by Mr. Howard Martin, was whether the owners had the right to claim compensation for the first twelve months after the war in respect of a road having been closed. Mr. Howard Martin must have considered that the words "so closed" referred to the original closing; he, however, thought that they referred to the closing with the consent of the Commissioners. The words "so closed" appeared twice in the section; the Commissioners might require, as a condition of their consent to the continued closing of the highway after twelve months, the substitution of another highway in the place of the highway "so closed." The words appeared to mean "so kept closed" with the consent of the Commissioners, and if in that case "so closed" only applied to the case of a road so kept closed with their consent, the same would apply to the case where the owner had the right to claim compensation.

Mr. Cuthbert Lake had raised some interesting points, but he did not think Mr. Lake made it clear as to whether the matters he spoke of were affected by the Defence of the Realms Act or by the Act under consideration. His own opinion was that the powers under the Defence of the Realms Act would cease on the determination of the war, and that occupation would be continued under this Act. A great deal of land had been taken without an agreement, and therefore the department was not required to give notice when about

to relinquish it. Mr. Lake had said that in his experience there was generally an agreement under which notice had to be given by the Government before giving up the land, and therefore no difficulty would arise, as the owner would know perfectly well whether the Government meant to continue in occupation of the land or to give it up, but in his experience that was not the case. In a great many instances there were no agreements at all; the land had been taken, and at the termination of the war there would be hundreds, probably thousands, of owners and tenants writing to the Lands Branch of the War Office asking if they could resume possession of their land. It would be impossible for the Lands Branch as at present constituted—and they all hoped that departments would not be made much larger—to give any definite reply beyond the ordinary acknowledgment for a very considerable time. Before doing so they would have to ascertain from the various commands all over the country whether it was necessary, in the interests of the country, to retain this or that particular piece of land.

What the position would be if they finally came to the conclusion that a particular piece of land was not required, he did not quite know. Would they say that they had given it up on the termination of the war because it was not actually in their occupation, although still in their possession as it had never been given up? or would they say that having kept possession until this date, although not occupying it, they would pay rent for the time which had passed since the termination of the war? Under such circumstances it would appear that rent ought to be paid from the termination of the war until such time as definite notice was given that the land would no longer be required.

Mr. Allen disagreed with the last paragraph of the Paper, and considered that the value of land and buildings taken under Section 3 should be depreciated, if such depreciation were caused by any buildings erected by the owner, or by any buildings to which he had contributed, or by any other act of the owner depreciating its value. It had to be remembered that the land must be in the occupation of the department at the termination of the war, and that under Section 10 the certificate of any Government department shall be *primâ facie* evidence that such land is in the occupation of the department, and if Mr. Martin was correct, the owner had no right to appear before the Commission to give evidence in a contrary direction.

He thought that there might be cases where an owner had carried out works on his own initiative which had depreciated its value; the fact that a Government department was in possession would tend to show that such works were for the benefit of the State. There would be many cases where owners had carried out works or used their land in such a way as would have depreciated its value at the direct instigation, or even under the orders, of the State. It might be a controlled establishment, and might have been used for a purpose for which it was never intended; alterations might have been made to fit it for that purpose, and those alterations might have depreciated its value. Whether a controlled establishment is in the occupation of a department or not he did not know. Surely, under such circumstances, it would not be just for the State to say to the owner, "You have done what we wished you to do, or what we have ordered you to do, but now we are going to purchase your property, and in assessing the compensation we shall reduce the sum

“payable to you by the amount by which the value of
“your property has been depreciated by the acts you
“have done.” He still did not think that the wording
of paragraph 6 (c) was clear, and hoped that the State
would not, under the Act, take what appeared to him to
be an unfair advantage of an owner.

The points he had dealt with were the most important,
and he would not weary them further by speaking of
others; but would instead thank both Members and
Visitors for listening to his Paper, and for the interest
they had shown generally in the subject.

The proceedings then concluded.

THE EFFECT OF WAR CONDITIONS UPON THE PROPERTY MARKET (URBAN).

BY J. G. HEAD (FELLOW).

*Read at the Ordinary General Meeting of THE SURVEYORS'
INSTITUTION, held on Monday, 16th April, 1917.*

GEORGE FRANCIS STEWART (President) in the Chair.

I have been honoured by an invitation from the Council of The Surveyors' Institution to express an opinion upon the effect which the War conditions have had upon the values of property up to the present time, and as to the future effect which may be expected after the conclusion of peace.

It is possible that this great honour has been bestowed upon me because I was bold enough, in October, 1915, to utter, in another place, views as to the effect up to that time, to formulate reasons for the changes which had been observed, and even to attempt to forecast the position after the war. It is obvious that the last-named attempt could only be of a superficial and tentative kind, since not only would it be impossible to prophesy the result of the war, but even with the firm conviction that Great Britain and the Allies would be victorious, no one could foretell the financial and economic conditions under which the nation might

labour even when that desired consummation was reached.

There were, it is true, certain broad facts, apparent to all, which could be registered, and certain acknowledged principles governing property values, which, when applied to those facts, pointed towards results which could be prognosticated with more or less confidence. The points raised were:—

Reasons for the drop in prices which had already taken place ;

Principles tending to appreciate or depreciate values in the future ;

Observations on the practical results which might reasonably be expected to attend the operations of those principles during the period following the war ;

and the present occasion affords the opportunity of bringing up to date the results of the war conditions, of noting how far events have justified those observations, and of seeing to what extent they justify the conclusions which were deduced therefrom.

In the first place, the tabulated results of auction sales at the London Mart, taken in conjunction with the universal experience of those dealing with landed securities, indicated a serious diminution in the volume of business done, and also in the prices obtained for those comparatively few properties which changed hands. Certain reasons were adduced in order to account for those results, such as—

The withdrawal of public interest from the property market owing to patriotic absorption in the war stifling investment and repressing all desire to launch out into new undertakings ;

The withdrawal of millions of the population from the world of commerce to that of military and naval service ;

The concentration of large numbers of those remaining upon work directly connected with the war ;

The breaking up of families by enlistment, rendering the establishment of new homes inconvenient, and consequently reducing the number of purchasers for occupation ;

The menace of the stability of all forms of investment, and the diversion of capital to the extent of millions of pounds into the War Loans ;

The high rate of interest afforded by gilt-edged securities (then $4\frac{1}{2}$ per cent.) rendering house property comparatively unremunerative, unless bought at a price proportionately lower than its previous value.

These reasons may or may not cover the ground, but all will agree in the important point that these reasons still exist and still operate. They still tend with increased force to depress prices, and will continue to do so until they are entirely removed. The sums of money required for the prosecution of the war have risen from £3,000,000 to £6,000,000 per day. War loans have recently been paying 6 per cent., and their total has mounted to thousands of millions. The numbers engaged in the war are higher than ever, conscription has replaced enlistment, all available areas are being scoured for recruits, and large numbers of manufacturing concerns have been taken over by the Government.

Every reason, therefore, adduced to explain the 1915

depreciation is emphasised. Indeed, all the influences engendered by war conditions are still at work, both appreciatory and depreciatory, and the disturbance of economic conditions has been phenomenal, profoundly affecting the finance of every country. In the countries involved in the hurly-burly of war, foundations have been tried, fabrics subjected to forces never contemplated, much that had every appearance of permanence has been uprooted, overturned, and destroyed, every security has been tested to the utmost limit, and that which remains unshaken under such conditions will deserve the confidence of investors.

Obviously, then, it is of the greatest importance to all concerned in the great landed interest to know how it has stood the searching test of war conditions. To this end inquiries have been made of representative auctioneers and surveyors in the various centres of England and Wales, returns have been obtained from the London and provincial auction marts, from the London County Council, and from the municipal representatives of other towns. The returns which have been made are the result, not only of the experience and judgment of many of the foremost men in our profession, but also of considerable labour in the preparation of the statistics on which that judgment is based. I take this opportunity of offering my best thanks to all those gentlemen who have so kindly and so efficiently furnished me with information on the subject we now have under consideration.

For the purposes of comparison the country has been divided into four divisions:—

The East Coast area, or that more immediately affected by the menace of enemy bombardment and Zeppelin raids ;

The Southern and Western districts, as being comparatively free from that menace ;

The Northern and Midland manufacturing areas ;

London and its surrounding neighbourhood.

Urban centres have been selected in the respective districts, and particulars gathered relative to the following subjects on the basis of a comparison with pre-war conditions :—

The number of sales and the resulting turnover ;

The selling prices of ground rents, factories, large and small shops, large and small dwelling-houses ;

The difficulty or otherwise of letting similar premises ;

The variation of rentals obtained for premises newly let ;

The difficulty or otherwise of negotiating mortgages, the rates of interest demanded, and the proportion of cover required ;

The effect upon prices and rentals of the increased cost of upkeep due to the rise in prices of labour and materials in the building trade.

The particulars gathered from various districts naturally show considerable variation, but there are certain items which show consistent results over the whole area, as follow :—

Sales by auction or private treaty, for instance, have been fewer by at least 60 per cent., and the turnover has been proportionately reduced. There have been very few dealings generally, and then only under the pressure of necessity or ardent desire.

Freehold ground rents show a decline in selling price of some 20 per cent.

Shops and dwelling-houses have sold principally for occupation, showing a decline of some 20 per cent. to 25 per cent.

Lettings, with few exceptions, show a sharp decline in the demand for large houses, for those of medium size the demand has been almost stationary, with a slight tendency to decline, whereas small houses have let readily, the supply being by no means equal to the demand.

For large and medium-sized shops there is a normal demand, but small shops have in some districts been at a discount.

Factories have found tenants without difficulty.

Rentals have followed the demand indicated above, *i.e.*, they have fallen with regard to large houses; medium-sized properties have maintained their value, while the rentals of small houses have shown a markedly upward tendency.

In the case of large and medium-sized shops, rents have been maintained, although in highly rented districts dependent upon the custom of wealthy private residents it has been found necessary occasionally to make a temporary allowance of rent.

Mortgages have been increasingly difficult to obtain, and the rate of interest has increased by from 1 to 2 per cent., as much as 6 per cent. being asked in some cases.

In respect of *Building Land* transactions have been practically nil; the Government's recent restrictions in building have for a time put the finishing touch to the

condition of an industry which was, owing to the war and other influences, in a very languishing state.

The *Cost of the Upkeep* of property has been materially raised by the increased cost of labour and materials in the building trade. The effect, however, has not yet been fully felt on property values. Eventually it must do one of two things, either it must be reflected in higher rents (where the landlord does the repairs), or, if these are unobtainable, capital values must suffer. At the moment it has had the effect of postponing all repairs, except those which are urgent, and of hardening rents, the latter operation being rendered possible by the shortage of that class of house principally concerned with the question of upkeep.

These factors are common to all districts, and show the main trend of the effect of the war conditions.

Dealing with the local phenomena, we find that it is on the East Coast that the effect is most apparent. In Margate, Ramsgate, Lowestoft, and towns similarly exposed, the business of property dealing has been brought to a standstill, numbers of residents have left for inland and western districts, and the influx of visitors has been small, having been temporarily diverted to more favourable situations.

In the Northern and Midland areas war work has stimulated all business connected therewith; houses have been filled up, the demand for factories has exceeded the supply, and money has flowed in and circulated freely.

The Southern and Western districts have profited by the exodus from the East, and rents have been maintained.

In London and its outer ring some districts have shown surprising business activity, which is reflected in

the maintenance of rentals of nearly all classes of property, but, generally speaking, the main trend is similar to that prevailing throughout the country.

Within the county of London the returns of rate collection show that during the first year of the war "empties" increased only 5 per cent., and even that increase was in respect of shops and residences of high rental value rather than of properties of medium size and small houses.

On the whole it would appear that there has been no general increase in losses due to "empties."

In London we have also the advantage of the Auction Mart return, which furnishes us with the most representative guide as to the movement of the property market. A statement is given showing the amount of sales consummated during the years 1913, 1914, 1915, and 1916, from which we notice a diminution in volume up to the end of 1915, and a slight but encouraging increase since that time.

SUMMARY OF AUCTION SALES HELD AT THE MART DURING THE YEARS 1913-14-15-16.

		Quarterly Total.	Annual Total.
1913—Jan.—March	...	£344,372	
April—June	...	1,165,611	
July—Sept.	...	313,351	
Oct.—Dec.	...	522,603	
			£2,345,937
1914—Jan.—March	...	£400,141	
April—June	...	962,505	
July—Sept.	...	369,679	
Oct.—Dec.	...	134,304	
			£1,866,629

		Quarterly Total.	Annual Total.
1915—Jan.—March	...	£195,262	
April—June	...	287,676	
July—Sept.	...	162,341	
Oct.—Dec.	...	158,391	
			£803,670
1916—Jan.—March	...	£147,457	
April—June	...	288,434	
July—Sept.	...	169,963	
Oct.—Dec.	...	323,005	
			£928,859

Looking at the results set out above, we see that they present, as might be expected, some variety of detail, according to the local conditions prevailing. These variations are, however, but the cross-currents and internal eddies which accompany every flood, and make little or no difference to the strongly marked tendency operating over the whole country.

In estimating the significance of the results, it must be realised that that significance lies not in the absolute figures, nor even in the fact that prices have fallen since the outbreak of war; such a fall in capital value was inevitable, and has occurred with regard to all securities without exception; it lies rather in the comparison between the extent of the fall in the property market and that shown by other classes of investment. To appreciate this fully we must revert for a moment to the relation between the different classes of investment.

The basis of all investment is security. The ideal security is one in which the capital is safe and easily realised; in which the income is steady, regular in its payment, and free from trouble in collection. In return for such absolute security the lowest rate of interest which the state of the money market permits, is accepted

by the investor, and just so far as any individual investment departs from the ideal security, so much higher is the rate of interest which the investment is expected to pay.

As a matter of fact there is no investment whatever which exactly conforms to our definition of the ideal security, for even those which are designated "gilt-edged" are subject to fluctuations of capital value according to the greater or less value of money for the time being. Nevertheless, the gilt-edged is the nearest available approach to the ideal security, and, as such, it forms a datum with the rise and fall of which all other securities rise or fall more or less in proportion. For example, in the times when gilt-edged securities (Consols) were paying $2\frac{1}{2}$ per cent., investors were willing to buy freehold ground rents to pay 3 per cent., leasehold ground rents at 4 per cent., and freehold rack-rents at 5 per cent.; while leasehold rack-rents were expected to pay 6 per cent. to 8 per cent. according to circumstances.

If therefore we compare the fall in gilt-edged securities with that of the property market under circumstances which test both to the uttermost, we may look to obtain material from which to form a reliable opinion as to the stability or otherwise of landed investments, and to demonstrate to what extent they deserve the confidence of the investing public.

Let us therefore begin by comparing the movements of Consols with those of freehold ground rents, which may be described as the gilt-edged security of the property market, and which therefore afford the best comparison.

During the period January 1st, 1914, to December 31st, 1916, the highest and lowest prices of Consols were:—

1914	...	...	$77\frac{1}{8}$	—	$66\frac{3}{4}$
1915	...	...	$69\frac{3}{8}$	—	57
1916	...	...	$61\frac{3}{4}$	—	56

showing a variation of more than 27 per cent. During the same period the fall in the sale price of freehold ground rents averaged 20 per cent.—a comparison in favour of the property market, and one which is valuable as being made between two investments which have in common absolute stability of income and the maximum degree of security for capital in their respective spheres.

With regard to other property investments, such as shops and residences, greater hazard attends capital and income alike, so that under the shock of war we might expect to find a large depreciation of capital value; indeed, it would be no reflection upon their excellence were that the case. Yet in actual fact the price of good leaseholds has declined only about 25 per cent.

Look now at the second essential of a good security—stability of income. We find it is true that the rents of large residences have declined, and that in certain districts reductions have been made in the rents of large shops for the duration of the war; but medium-sized properties have held their own in the matter of rental, while the uplifting of the smaller properties was so marked that an Act of Parliament had to be passed to prevent the rents being raised; and it is no exaggeration to say that, but for the Act, they would have risen throughout the country, not through the cupidity of landlords, but by the natural increase in value through the increased demand.

Again, if we look at mortgages, it is true that they are more difficult to negotiate; diversion of capital makes that inevitable. The rates of interest have been

raised; again inevitable, since the interest on gilt-edged securities has been raised. But it is significant that while the interest on gilt-edged securities at one time rose from $3\frac{1}{4}$ to 6 per cent.—an increase of $2\frac{3}{4}$ per cent.—the highest rate demanded for mortgage interest is 6 per cent., showing a rise of 2 per cent. only over pre-war rate.

That the property market is sound and healthy is proved by the manner in which it has withstood the shock of the upheaval. Nevertheless, it cannot be denied that its volume has greatly shrunk owing to the influences to which we have referred. True, there has been, during the last few months, a satisfactory movement towards revival; but, depending as it does upon the amount of money available for investment, it is inevitable that until easier monetary conditions prevail the property market must suffer, and the amount of business done remain at a figure much below the normal. The natural sequence of events would be that, after trade, commerce, and industrial undertakings generally have achieved prosperity, after money has been accumulated to an extent which will permit of the releasing of some considerable portion of that which is now locked up in Government securities, after money has been found for the industrial expansion which is looked for, after these events, and not till then, would the property market resume its buoyancy of operation, capital values reviving automatically as gilt-edged interest declines. But to reach this stage will require the lapse of considerable time, and meanwhile the important market with which we are dealing must remain depressed, with results detrimental to the nation as well as to the individual, unless some practical assistance is forthcoming to meet the

difficulty, and to bridge over the interval of the transition period.

The need being thus proved, the duty now devolves upon us of showing that the property market is worthy of such assistance. In the first place then, if we return for a moment to our definition of the ideal security—one in which the capital is secure and the income stable—we shall see that the phenomena disclosed by our inquiries are most important in estimating the status of the property market in comparison with other forms of investment. We have, first, a variation in capital values less than that of the typical gilt-edged security, notwithstanding the fact that the property market prices are those realised under what we may call a “forced sale”; and next we find the rental or income exhibiting a steadiness which is remarkable when it is remembered that the rental which a prospective tenant is willing to pay for premises he is taking is that element which is the most susceptible to the influence of surrounding conditions.

It is amply proved, therefore, that the property market is no mere theatre for speculative enterprise, but that it provides a means of investment of the highest order. Nay, when it is realised that it carries with it influences of political and economic importance, in that ownership tends towards stability of thought and action, and that (the purchase of a home being frequently the first investment of savings) it lays the foundation of thrifty habits, it is, I venture to assert, no exaggeration to say that the property market is entitled to be considered as the premier security of the nation. But beyond all this, excellent as it is, there rises the fact that, bound up with the well-being of the property market, is the problem of the “Housing of the People.”

Unless the property market is in good condition houses cannot be built, and the people must suffer for want of that prime necessity of life—a roof to shelter them. That this is no idle statement is shown by the actually existing state of things. The shortage of dwellings of the smaller type is most serious. From every quarter the cry is the same, “We need more work—men’s dwellings,” “None to be had”—“A famine in “small houses.” These are fair specimens of the reports received, while the correspondent from one midland town states that at least 14,000 are required in that district alone.

Let us look for a moment at the facts. According to Mr. A. W. Shelton, of the National Housing and Town Planning Council, about 80 per cent. of all the dwelling-houses in the country come within the description of small dwellings, *i.e.*, of the annual value of £20 downwards. To keep pace with the increase of population, the demands of sanitation, and the renewal of worn-out buildings, at least 100,000 should be built every year. The number actually constructed has fallen far below this necessary minimum; in fact, the annual numbers have shown a sharp decline, until during the year 1916 the number of small houses built is stated to have shrunk to the miserable total of some 10,000. The shortage at the present time reaches the formidable total of 500,000, and the correspondent who speaks of there being a “famine” uses a term which is not a whit too strong.

Now it is further shown by statistics that of the total number of small houses built, at least $97\frac{1}{2}$ per cent. have been erected by private enterprise, the remaining insignificant fraction representing the entire output of national and municipal bodies and of public utility

societies. Further, the difficulties and disadvantages of the provision of small houses by public bodies is so great that the conviction is forced upon us that it is still upon private enterprise that we must rely to secure an adequate provision for the necessary accommodation ; but private moneys cannot be attracted to an unduly depressed market, and if the problem is to be satisfactorily solved, steps must be taken to relieve the depression by increasing the influx of capital.

Enough has been said, therefore, to show that the assistance of the property market is an object worthy of special effort.

As to the means to be adopted to this end two essentials stand out above all others :—

Money must be forthcoming in the shape of liberal loans at moderate rates of interest ;

The property market must be freed from the paralyzing influence of menacing legislation.

The provision of cheap money would render private enterprise a reasonably profitable undertaking and tend to induce capitalists to undertake the erection of houses. It would also stimulate the business of the property market as a whole, and sustain it over the transition period until its normal functions are restored in the ordinary course of commerce.

The method by which this cheap money is to be obtained should be our next consideration.

Under normal conditions a considerable proportion of the purchases of house property are assisted by means of loans, and in the existing circumstances the proportion of dealings requiring such assistance must of necessity increase, since fewer purchasers will be in a position to pay for the property outright. The loan

is secured upon a mortgage of the property, and is advanced by a building society, bank, or from private funds. In the two latter cases a margin of one-third is required, building societies being content with somewhat less, and the interest is fixed by the current price of money.

In the immediate future, during the transition period, if the market is to be effectively assisted, the proportion of loan to purchase moneys must be more liberal, and at the lowest possible rate of interest. Hitherto all advances on dealings in property have been made solely upon the value of the property, and even in commerce, where a tradesman asks for an advance to enable him to prosecute some scheme which to him seems advantageous, the lender—usually a bank—requires the deposit of deeds of properties belonging to him, or of stocks or shares.

The essential feature of the security thus demanded is that it should be readily negotiable or convertible into money. For the purpose of our present consideration this may be termed “absolute security.” Private lenders probably could not be expected to entertain any other form of security, but the remaining sources of borrowed capital, such as building societies, banks, or even the State, might well pass beyond this limit; indeed, building societies already lend a far larger proportion than the conventional two-thirds, securing themselves by repayment on the instalment system, and improving their position with every payment. That this is a sound method is shown by the extent and success of building societies throughout the kingdom. As to the ordinary banks, the strict lines of British banking are defined by *The Bankers' Magazine* as refraining from making advances where the security is not fluid or easily realisable, but of a nature likely to

tie up money for a lengthened period so as to interfere with the prompt payment of sums deposited with them. Nevertheless, bankers have been accustomed to relax these rules in favour of customers of known integrity and ability, and in addition to make loans in furtherance of commercial undertakings considerably beyond the value of the actual securities lodged with them.

It is now, however, realised that at the end of the war conditions will be such as to make it necessary that such extended loans shall be the rule and not the exception. If they cannot be arranged through the medium of ordinary banks, an institution will be set up possessing ample powers adapted to that end. Such an institution is the proposed *trade bank*, which, being free from the restrictions of ordinary banking, will be in a position to foster commercial undertakings wherever advances of capital may be required. Such banks have long been known in France and other European countries, and have materially contributed to the commercial prosperity of the districts in which they exist. The feature of such institutions is that, after due inquiry into the merits of the scheme for which the advance is required, loans are arranged not only beyond the limits of any absolute security which may be available, but even in the entire absence thereof. It must not be concluded, however, that the loan is made without security. On the contrary, the security upon which the bank relies is fourfold—first, the merits of the particular scheme; next, a certain amount of control in the prosecution of the object; then the goodwill of the business and the financial standing of the borrower; and, lastly, his character and ability. These constitute what may be called “latent security,” as distinguished from the “absolute security” above referred to.

Land banks also make advances to agriculturists upon similar lines, the essential point in every case being the existence of this "latent security."

If, then, we can show anything in the property market analogous to "latent security," or any alternative which will equally secure payment of interest and return of the borrowed capital, we shall have established the appropriateness of extending to the property market the facilities which commerce will derive from the operation of the trade bank. To make such assistance of general value it will be necessary to let it be known that all legitimate purchasers of property may hope to derive therefrom more liberal financial assistance than has hitherto been obtainable from the ordinary sources, while the inquiry which would precede the granting of such assistance would secure the exclusion of undesirably speculative schemes.

It should be observed that the assistance required by the property market is not in the shape of loans without absolute security, but only somewhat beyond the orthodox two-thirds proportion, and I claim that this additional accommodation can be adequately secured.

In the first place, in the case of business premises purchased for occupation, the borrower can produce the same form of "latent security" which is present in commercial undertakings, namely, the goodwill of his business, and his character, ability, and financial standing. Private houses purchased for occupation offer a similar security, but without the business goodwill.

In the case of pure investment—and this class would include the all-important section concerned with house production—the "latent security" is absent in the form in which we have defined it. There is, however, an effective substitute available, the key to which is to be

found in the methods of building societies, viz., the regular and systematic repayment of interest and capital.

The building society system is not of itself sufficient to meet the difficulty, for the reason that building societies are local and limited in their action, and that they do not possess the co-ordination necessary to provide a consistent relieving action throughout the land such as would be necessary for our purpose. Further, they hold other people's money and must make a profit. They themselves borrow from banks, and are affected by varying rates of interest. What is wanted is a lending organisation operating throughout the land, and able to lend money at the lowest possible rate of interest consistent with the avoidance of loss. To do this would require a special organisation, and possibly direct assistance from the State.

Under existing conditions, when a man borrows money to complete a purchase, he takes the whole of the income, pays interest on the loan, and retains the rest as an annual profit on his investment. My suggestion is that this process should be reversed; that where the lending association advances a larger proportion than is customary it should receive the whole of the income, pay the borrowing owner interest on the capital left by him, and retain the balance towards the reduction of the loan. By this means the lending association would recoup itself gradually until the loan became small enough to be transferred to a private lender by way of an ordinary mortgage. For example, take a case of normal times.

Assume that a buyer purchased property for £3,000, bringing in a rental of £150 per annum, and borrowed £2,000 at 4 per cent. The statement of affairs would be as under:—

	£
Rental income	150
Interest on loan	80
Profit income retained by the borrower	£70

Now if the lending association were to advance 80 per cent. of the whole, or £2,400, and to receive the income, the statement would be as under:—

	£
Rental income	150
Interest paid to borrower on his capital, £600 at 4 per cent.	24
	126
Interest on loan of £2,400, at 4 per cent.	96
Profit rental, applicable as a sinking fund to reduce the loan	£30

This repayment would reduce the interest payable and leave a larger amount available every year for the reduction of the loan, with the result, in this particular instance, that in eleven years' time the loan would be automatically reduced to £2,000, or the usual two-thirds proportion, when it could be readily transferred to a private lender.

In the example shown normal rates of interest have been employed. Under existing circumstances the rates of interest, both of income and of loan, would be greater. This, however, would not invalidate the principle indicated; indeed, the proportion repayable would probably be higher under existing conditions than that shown in the example set out above.

No allowance is made for expense of management, as the example given is one where the property is let on

repairing lease, and involves only the quarterly collection of the rent. Under other circumstances the profit rental would naturally be higher, leaving room for a charge for management.

The advantages of the method suggested are :—

It would meet the difficulty of money shortage ;

It would free the loan capital within a period much shorter than would be the case under the building society or instalment method ;

It would cultivate the highly important habit of thrift by making possible once more the purchase of a home ;

It would stimulate the building of houses by private enterprise, and, in so doing, it would go far towards solving the burning question of the peoples' housing, rescuing this most important of post-war problems from the doubtful and dangerous solution which is held to lie in the provision of housing by the municipality or by the State ;

Finally, by its automatic action in securing regular payment of interest and replacement of capital, it would qualify the transactions of the property market for participation in the assistance of the trade bank or other similar institution.

But there is another thing which is quite as important to the welfare of the property market as is the proposed financial assistance, and that is the freeing of it from the fetters of hampering and paralysing legislation. I allude to the malign influence of the Finance Act, 1909-10. This enactment set out to impose taxation on various interests in land. It imposed three

forms of tax—increment duty, by which it was intended to secure for the community a proportion of increment in value on the assumption that such increment was due principally to the action of the community; undeveloped land duty, which was aimed at those who withheld from development land which might be developed with profit to the community; and reversion duty, which provided that when, at the termination of a lease, the property came into the hands of the freeholder, he should pay a substantial proportion of the increased value to the Government. This tax as applied by the Inland Revenue Department is apparently based on what many of us regard as an unfounded assumption that the freeholder then comes into something in the nature of a bonus, or of some increment for which no consideration has been given by him.

It is not proposed, however, to discuss the appropriateness or otherwise of this taxation, but rather to point out its effect on the property market. Of course any taxation must reduce the capital value of the object taxed, but so long as the incidence of the tax is clearly defined, and its extent is capable of being estimated with accuracy, the loss in value can be readily calculated at so many years' purchase of the tax, and, after the first loss has been digested, the operations of the market should not suffer in consequence thereof. But in the case of the Finance Act, 1909-10, there are features present the effect of which goes much farther than the actual loss due to the taxation itself. In the first place, the language of the Act is so ambiguous and confused that the bare meaning thereof has taxed the analytical powers of our most eminent judges. Then the circumstances under which it was passed, and the speeches of many of its adherents, supported the view that it was

only the beginning of a campaign against land, and that it constituted a menace against that subtle but all important quality in an investment—its credit. By lessening the confidence of investors in its safety the Act has injured the property market as nothing else could have done. It is the apprehension of trouble (undefined and difficult to estimate) which is chiefly responsible for the pre-war reduction in the capital value of land and houses, and it is an aggravation of the charge that this condition of things has been brought about, without any corresponding advantage to the State. Ordinarily the depreciation consequent on the imposition of a tax is counterbalanced by the benefit derived by the country from the taxes collected, just in proportion as the amount of the tax received exceeds the cost of collection. As, however, in this case the amount collected falls far short of the cost of collection, the Act derives no justification under this heading.

The combination of the uncertainty above referred to, and of the imposition of the actual tax, has, in addition to the above-named general effect, had the specific result of paralysing private enterprise in the production of houses for the accommodation of the working classes. The enormous proportion which this class of house bears to the general total of dwelling-houses, and the unparalleled shortage of such accommodation, shows how serious has been the effect of this enactment, and justifies the statement that the Act has in this respect been injurious to the country, while it has entirely missed its mark as a means of revenue production.

It has been suggested that amendment of the acknowledged defects of the Act would meet the case; but in view of the pressing emergency of war conditions,

when it is essential that nothing should be done to hinder, but that everything possible should be done to foster the credit of the country, it is urged that repeal is the proper course. Nothing short of that would remove the feeling of insecurity, which is the chief element of the evil which has been wrought, and therefore upon national, as well as economic grounds, Part I. of the Finance Act of 1909-10 should be repealed, not as an undue favour to holders of landed property, but as a measure of necessity directed towards the conservation of the national resources.

It is obvious that in good husbandry the ground must be cleared before the crop can be cultivated, and, therefore, in summarising the conclusions of this Paper, the suggestions are placed in the following order:—

First, let the dead hand of harmful legislation be removed, and next, let provision be made for liberal financial assistance to all sections of the property market. I venture to predict that if such assistance be forthcoming, there need be no long transition period of depression, but that this enormous market may, with a little help of a most reasonable and legitimate nature, be speedily restored to the prosperous condition which its excellence merits.

No excuse is necessary for the stress which is laid upon the importance of the problem of the property market, for that is self-evident, and I trust that not only has its urgency been demonstrated, but also that it is capable of solution and worthy of the best efforts which the nation's advisers can bring to bear upon the subject.

The inquiry which elicited the facts upon which this Paper is based has brought to light many other points worthy of attention, which, although not directly related to the property market, have yet a bearing thereon, in

that they affect the general well-being of the people, and so reflect upon that department of national industry which provides them with their dwelling-places and business houses.

As an example, the impossibility of foreign travel has filled many of the holiday and health resorts in our own land, bringing something like a revelation to many who had apparently been under the impression that to enjoy beauty of scenery and healthful recreation it was necessary to go abroad. The same cause filled the British spas and watering-places. British and foreign visitors alike discovered that both the waters and the treatment were of the highest merit, and that the "cure" could be found there as readily as at any Continental "kurhaus." The fetish of the German spa being thus broken, the future prosperity of our native spas remains in the hands of those who are responsible for their conduct, and who have it within their power, by wise management, to secure a constant stream of visitors drawn alike from our home population and from abroad.

The quick and effective response evoked by the stern call of necessity in the production of many materials which we had loosely allowed to slip from our grasp into that of the foreigner,—the revelation of the immense and almost unsuspected power of manufacturing any given article,—and the production of commodities which had never previously been made in any quantity in this country, should secure to our people new and important fields of commerce, if wise precautions are taken to avoid the sterilising of these founts of industry.

We have learned the unwisdom of leaving home production to the ungoverned principle of supply and demand, and of regarding purchase in the cheapest

market as the essence of a nation's economic welfare. This course of action in the past has placed Britain in a position of serious disadvantage in this time of war. Let us in future produce under the pressure of patriotism those things which we have produced under the pressure of war conditions, and make it certain that never again shall Britain be found, in her extremity, dependent upon a foreign and possible hostile power for things essential, not only to her welfare, but to her very existence. The lessons of adversity are priceless, and if under the stress of common danger, in which capital and labour have joined hands in the trenches, there should grow up a better understanding born of mutual knowledge, if, in the arrangement of our national affairs, political economy should be associated with patriotic economy, if the life of the nation should be lifted to the plane of the ideals for which it is striving, then the benefits which are gathered from the smoking ashes of the battlefield would outweigh even the heavy price which has been exacted by this war of the worlds.

The PRESIDENT, having at this stage to vacate the Chair, the same was taken by Mr. ARTHUR L. RYDE (Vice-President).

Mr. J. D. WALLIS (Member of Council) said he had great pleasure in proposing a hearty vote of thanks to Mr. Head for his excellent Paper. They were all much indebted to him for the trouble he had taken in its preparation, and they would appreciate the statistics he had given, which would afford a valuable record in their *Transactions*, as showing what the conditions generally were during the present trying time.

The question of the effect of the war conditions upon

the property market was a matter of great interest to all practising surveyors who had to deal daily with the changes in value under existing conditions. He thought the general conclusion they would come to, after hearing the Paper, would be that there had been, undoubtedly, a great decrease in the volume of business, but they must be careful not to confuse that with decrease in value, because decline in volume of business was quite a different thing from decline in value. As pointed out by Mr. Head, the decline in value had followed the money market, although property had not suffered as much as gilt-edged securities.

No doubt there were certain properties which it would be very difficult, if not impossible, to realise at the present time, and he supposed that some of the most difficult properties they might have to value to-day were banks, insurance buildings, and blocks of offices and first-class shops in the main thoroughfares of towns, many of which were not marketable, simply because money was not available, at the present time. Many of those properties were, therefore, in an unfavourable position for the moment, and if they had to be valued on the basis of a forced sale to-day, it would be necessary to allow for a considerable depreciation; but, notwithstanding that, he had no fear as to the future of that class of property. So long as they were held there was little doubt they would recover their value, particularly as the cost of building had considerably increased.

His own experience in manufacturing towns in the north of England followed very generally the lines indicated in the Paper. There had been enormous development of war work; large businesses, works, and factories of all kinds necessary for producing materials required in connection with the war had been estab-

lished. Many new works had been erected and many others extended, and there had been a considerable demand for sites suitable for the erection of war industries. There was also unusual prosperity amongst the working classes, the result being that small houses were well occupied, realised good prices when they were sold, and returned a good income to the owners, there being few or practically no empties, and very little risk as regards loss of rents. On the other hand, land suitable only for the erection of dwelling-houses was practically unsaleable; at the present moment there was no opportunity for laying out such building land, and, as stated in the Paper, chief rents and ground rents had declined in value.

He remembered well when $33\frac{1}{3}$ years' purchase could be obtained for well-secured ground rents at a time when Consols paid $2\frac{1}{2}$ per cent., whereas now similar rents would fetch only from 17 to 20 years' purchase; but, as pointed out by Mr. Head, this decline in value merely followed the general decline in the value of all high-class securities.

It seemed to him that one effect of the war would be to bring mortgages into greater favour, owing to the fact that capital invested in gilt-edged securities before the war had declined in value, while the capital invested in mortgages had remained intact, with an increase in the rate of interest, excepting mortgages on small house property.

On one point he did not quite follow Mr. Head, and that was in the severe criticism of the Finance Act. No doubt some amendment of such a complicated Act was necessary, and it was a pity that, in consequence of the war, the amendments promised had been shelved, but they would delude themselves if they imagined that

a repeal of the Finance Act would have any appreciable effect on the erection of small-class dwelling-houses.

In his opinion the housing question had now become so acute that it was one of the great problems waiting solution as soon as the war was over. The shortage of houses before the war was due, amongst other things, to the general increase in cost of building, the gradual increase in the cost of money, the rather rapid increase in local rates, and the increased stringency of local by-laws. All those matters together had tended, for many years previously, to deter building enterprise, and had almost entirely prevented the erection of the smallest class of houses, the house that was in most demand in the manufacturing towns, as it had become impossible to build small houses—containing, perhaps, four rooms at a rental of 5s. a week—and to obtain anything like a fair interest on the cost of building.

Mr. Head had referred to the additional cost of upkeep, but not, he thought, to the extra cost of building. It was impossible to predict what might happen after the war, but it seemed probable that the cost of building would remain at a higher level for some years to come.

He was entirely in sympathy with the proposal that liberal advances should be made with the object of assisting the chief industries of the nation, as he thought the prosperity and trade of the country after the war would depend to a great extent on the assistance the Government could give to enable those vital trades to be carried on in this country which Germany before the war was largely securing for herself.

He should like to see the establishment of trade banks and other institutions to assist the development of trade in this country, but at the same time he was bound to say that the proposal to advance 80 per cent.

of the cost of the erection of small dwelling-houses was one which called for much caution, because that class of property had, he supposed, let down more mortgagees than any other class of property. It would require very exceptional conditions before he should advise anybody to lend more than two-thirds on the security of houses let at weekly rentals.

Although they all acknowledged and gave full credit to private enterprise, which, as Mr. Head had stated, was responsible in the past for the provision of 97½ per cent. of the working-class houses, that had been done under conditions not prevailing to-day, and the housing problem, to his mind, was now too great to be tackled by private individuals, and should be considered jointly with the question of unemployment which might arise after the war. If those questions were to be dealt with in a proper manner—to provide decent houses for the people, to improve existing buildings, to clear slums, to obtain more healthy surroundings, and to meet unemployment after the war—they could only be dealt with effectively by the nation with national funds.

Although he had ventured to disagree with Mr. Head on some points, he appreciated the great value of the Paper, and had much pleasure in proposing a hearty vote of thanks to Mr. Head.

Mr. H. M. STANLEY (Fellow), in seconding the vote of thanks to Mr. Head for what he described as a most carefully prepared and lucid Paper that gave them much valuable matter on which to reflect, said he was not altogether in accord with the views expressed, though any criticisms offered would be made with great deference. Mr. Head's suggestions would be extremely valuable if they could be carried out by the State, but he was afraid that could hardly be done under

existing conditions. There was great difficulty in the State lending to private individuals, which seemed to be one of the remedies suggested by Mr. Head in his proposals with regard to trade banks.

Trade banks, as at present understood, would, he should think, be devoted largely to commerce apart from business as they understood it. If, however, any branch of such bank or other analogous institution could be devised to meet their needs it would, no doubt, be of assistance, though he could not agree with Mr. Head that it would have a far-reaching effect.

Of course one of the great difficulties of the property market was its restriction. As Mr. Head had pointed out, certain property would sell, and other property was almost impossible to sell, irrespective of price. It was this unsaleable property that was most difficult to realise even in the past. As a rule it was bought largely by people of small means who were able to raise two-thirds of the capital required at a lower rate of interest so as to secure the tempting return it promised on the margin; but if Mr. Head's suggestions were carried out, their inducement to purchase would be deferred, as they would have to wait eleven years to get the benefit of the increased income which on buying that kind of property they now expected to secure immediately.

Many who bought for their own occupation were tempted to do so because the rate of interest, at which they could get a mortgage, reduced their immediate establishment expenses; young men, for instance, were tempted by the fact that they could reduce their expenses by living in their own house, and he did not think they would successfully appeal to that class by merely showing the good such a scheme would do to the investor who was preparing for his old age.

Mixed up inextricably with this question was that to which Mr. Head and Mr. Wallis both referred, viz., the housing of the people. He agreed with Mr. Wallis that, much as it was to be regretted, it was impossible that private enterprise could provide a sufficient number of houses for some years to come. Working-class houses had been erected in the past by builders, generally of small capital, who had constantly to turn over their capital, which they could not lock up without stopping their businesses. He did not think that any bank, or institution supported by the State, could lend money to private individuals on that class of security alone.

He was glad to see that the Local Government Board was taking up the question of housing; it seemed probable that it would have to be dealt with by municipalities and local councils, and, much as he regretted it, he was afraid that as it would be some years before normal conditions returned to the money market, and the need was urgent, it was not practicable to deal with the matter by private enterprise.

He might perhaps be allowed to differ from Mr. Wallis as to his description of the property most difficult to deal with at the present time, viz., banks, insurance, and similar large buildings. He had considerable experience himself in that class of business, and he might say, generally, that at least in London, that was property in which one was most able to do business. It was a gratifying thing, for it showed the confidence that big financiers, banks, and others had, that London would maintain its position as the money market of the world; and they were taking advantage largely of the present opportunities of buying, and a very considerable amount of business had taken place on such property within the last two years, which had not been made

public and did not appear in the records of the auction marts.

There was one other point, the real basis of this question, and that was the price of money. Cheapness of money, or the reverse, was the prime factor, and until the times become normal the value of property would conform to the return shown by other investments, regard being had to the fact that those investments might not be so troublesome, perhaps, as property ; but property would, in course of time, undoubtedly recover. There were, however, a great many people who liked property, and liked to see what they owned, and if they could be encouraged to buy, they would do so, but the basis of value no doubt would be varied for a time from that to which they had been accustomed.

One point on which he agreed with Mr. Head was the effect legislation had had on the value of property. It was not alone as a result of the war that the public were apprehensive as to the future, not knowing what fresh burdens might be put on them, or whether, as a result of their own thrift, they might not find themselves less advantageously placed than their neighbours who had invested their savings in stocks and shares. Anything that could be done to limit the burdens to be carried by land in the future, in the sense that they should not bear more in proportion than other investments, would be to the great advantage of the property market. He was sure they all felt indebted to Mr. Head, and he had much pleasure in seconding the vote of thanks.

Mr. E. W. RUSHWORTH (Member of Council) said that although there was much interesting matter in Mr. Head's Paper, he proposed to confine his remarks to the first part and to deal with only one point.

The reader of the Paper had shown a considerable amount of courage in publicly proclaiming that there had been a fall in the value of property, as, apart from stocks and shares, that was a very unpopular thing to say. So far as stocks and shares quoted in the market were concerned, it could not be denied that their value had fallen, but with regard to property they would find that owners would readily listen to anyone saying that there had been a rise in it or that property generally had been unaffected by the war; but directly anyone hinted that there had been a serious fall, he would find himself classed by many property owners as a pestilent wrecker.

It was very difficult to dispute that, in face of the huge loans guaranteed by the nation at 5 per cent. interest, there had not been a fall in the value of property generally, and in many cases to a very serious extent. He thought that the Paper before them came at an opportune moment, because, in his opinion, one of the best things anyone could do to assist property was to endeavour to maintain a market for it, and to prevent property falling into that condition of stagnation which was so deplorable when there was a fall in prices. The first thing which had to be done in order to maintain a market was to admit it at once and recognise the extent of the fall. If this were not admitted, or admitted only to the extent of half what the fall really was, a state of affairs arose in which buyers and sellers were so wide apart that there was no market at all, and the idea got abroad that certain properties were absolutely unsaleable. In a great many cases that merely meant that they were unsaleable at a price which they were not worth. He was convinced that for the general body of owners it was better that there should be a market in which property could be freely dealt with, though

at low prices, as on a market of that character it would be found that prices had a tendency to rise and improve.

He did not suggest that any owner should sell his property for anything less than its worth—in fact, he did not suggest that owners should sell property at all: but, if an owner wanted to sell, he maintained that it would be much better to be able to take it into a market even where low prices were ruling, but where the market was open, and where there was some actual competition, than not to have any market at all.

Of course some owners would not listen to considerations of that sort; they would much prefer to wait for that meteoric person who was described as “the right man,” who would give, say, 10 or 20 per cent., or even 40 per cent., more for a property than it was worth. That man was no myth; most of them at one time or the other in their careers had had the joy of encountering him, but he was very upsetting to their judgment, and it was a mere speculation to stake their hopes on the idea that, out of all the properties in the market, their own would be the one that he would select for his operations.

In support of his view regarding the property market, he would instance the case of agricultural land, for which, they must admit, there was a real market—an astonishingly good market considering the dreadful times through which the country was passing. “Yes,” said some people, “there may be what you call a good market, but compare the prices with those of former days.” Exactly—that was his point—What happened in former days? There was a heavy fall, and people refused to recognise the extent of the fall, and as a result they had twenty years of deplorable stagnation, in which it was almost impossible

for a man to find a market for his property with competing bidders. After a long period the fall was recognised and the market began to rise, and at the present time that land, which had passed through such a period of depression, was now changing hands quite freely. Surely it would have been better if that market had been established at once, and that owners who wanted to realise their property should have been able to do so, even at low prices, through the existence of a market where there were competing bidders.

He did not undervalue the difficulty of determining the extent of the fall that they were to recognise, but the writer of the Paper had pointed out the way to set about it, and had given them the interesting results of his investigations. It would be folly to attempt to minimise the fall in value, but it would be equally foolish to exaggerate it. As an illustration of his point he would say that when valuing a property it was not an unusual method, after estimating its annual value, to multiply that by such a number of years' purchase as might be suitable; and in that way £100 a year derived from Consols—which just before the war was worth 29 years' purchase—was now worth only 22 years' purchase; that was to say that there had been a drop of 7 years' purchase, or about 24 per cent. of the years' purchase. Compare that with a net £100 a year derived from agricultural land of the class worth before the war 22 years' purchase; take 24 per cent. from that 22 years, and the result would be $16\frac{3}{4}$ years' purchase. Had the number of years' purchase of such land—worth 22 years just before the war—fallen to $16\frac{3}{4}$, or had 20 years' purchase fallen to $15\frac{1}{4}$? If they considered property which they knew themselves, of which they had had experience, and applied these calculations—which were arithmetically correct—he was sure most

practical men would say that the result was a gross exaggeration of the fall that had taken place. He thought that they would come to the conclusion that Mr. Head was right, and that there were qualities and elements inherent to land and house property which had enabled it to put up a much better fight against depreciation than many other first-rate securities.

Mr. HENRY LOVEGROVE (Fellow) said that he had listened with pleasure to Mr. Head's Paper, with which in the main he agreed. He was of opinion that even before the injurious legislation referred to came into force some public speakers did much to injure property owners, who, according to them, were either villains of the deepest dye or very wealthy people. Members of The Institution, however, knew to the contrary. There were scores of the poorer classes who had bought a little property through a building society, and of the middle classes who had invested considerably in the same way.

After the war commenced it became more difficult to obtain money on mortgage, and in a short time the speculative builder disappeared from the scene. In fact, last year there was a great decrease in the number of dwelling-houses erected. In his own district, one of the largest in London, several blocks of model dwellings had been built with charity money, but so far as private enterprise was concerned not one single dwelling-house had been built in that vast area, which had a population of 350,000 people. He thought Mr. Rushworth underestimated the depreciation that had occurred, because he himself knew several instances in which well-built property could be purchased for one-fifth to one-sixth of its original cost.

The depreciation in shop property was very marked ;

in some of the leading streets there were numbers of premises empty. He would never, himself, buy shop property. As every one knew, large stores and large establishments were killing the single-shop man. In particular, look at Southwark, or Upper Street or Liverpool Road, Islington. He could remember the time when people would offer a premium to buy or rent a shop in places where there were now scores of empty shops.

The present system of assessment was to his mind an additional adverse influence, as it ignored the rent actually received, clinging to the value of years before, and the tenant had to pay rates on a much higher sum than the amount of his rent. Then, too, the property tax, which was not of so much consequence when it stood at only 9*d.* in the £, but now that it was 5*s.* in the £ it became a very serious matter. Instead of being based on the rent it was based on the assessment, and if a tenant was paying £80 rent, and the net assessment was £100—he knew of such a case—how could the tenant pay £25, the amount of the tax, and get it back out of £20, the next quarter's rent? That was a puzzle he could not solve.

Again, the increment duty was also injurious and difficult to understand. He knew of a case in which leasehold property was sold for exactly the amount at which it had been previously purchased, and sheets of foolscap paper were wasted before the absurdity of charging increment duty was recognised officially. In another case the owners of a leasehold purchased the ground rent and gave it as an additional security to the mortgagee. The circumstances of the business changed, and after failure to pay interest foreclosure took place, and a loss of £150 was incurred, and yet the Government claimed £31 increment duty.

In his opinion, in any attempt to restore the confidence of the investing public two things were essential. One was the immediate repeal of the Finance Act, 1910, and the other the placing on the statute book of an Act to provide for leasehold enfranchisement. The thousands of building operatives in this country should insist on that being done at once.

The CHAIRMAN (Mr. Ryde), before putting the vote of thanks, said he would like to submit to Mr. Head a little mathematical problem in solving which he might perhaps spend a minute or two. His impression was that Mr. Head's suggestion (page 192) was impracticable, because anybody lending 80 per cent. of the total value would not be satisfied with 4 per cent. interest, and the calculation should be amended by altering the 4 per cent. into 5 per cent., the result being the figure 0. He thought that it would be impracticable to get a larger amount lent on mortgage than was the practice at present. It was his pleasure to put the vote of thanks for the Paper, which contained a great deal of valuable information, and which was of extreme interest to the profession.

The vote of thanks, having been put to the Meeting, and carried unanimously,

Mr. J. G. HEAD, in acknowledgment, said he was pleased that the Paper had met with their approval, and that it had served as an opportunity for the expression of opinions and for some valuable suggestions.

He accepted the challenge with regard to the sum which the Chairman had set him; he agreed in the result, but at the same time he should add that the rate of loan interest named by the Chairman was not that upon which the suggestion in the Paper was based,

and it was obvious that there must be a difference between the rate of borrowing and the rate of investment, or no transaction would take place. In return he would ask the Chairman another problem. If it were impossible for anyone to lend more than the orthodox two-thirds, how was it that building societies had managed to do so for many years past with such conspicuous success?

Mr. Wallis had been merciful in his treatment of the suggestions made in the Paper. That they did not agree about the Finance Act was not surprising; it was a matter for great divergency of opinion. He did not agree with Mr. Wallis, however, that the difficulty was mainly due to a gradual increase in the cost of production and in the stringency of by-laws. He quite admitted that both of those things had had their effect, but the decline in the production of houses was by no means gradual. If one examined a statistical chart showing the decline, the adjective to apply to it would be "steep" rather than "gradual." What was complained of was not the effect of the ordinary economic conditions. To that sort of variation every kind of property was subject. It was not by that sort of thing that the security of an investment was impugned, which was the injury complained of as having been inflicted on the property market by the passing of the Finance Act. For that reason it was felt that something drastic must be done if the credit of the investment were to be restored and the damage inflicted by the passing of the Act remedied.

Mr. Wallis had also said he would not advise anybody, in certain cases, to lend more than two-thirds. In the Paper he had said that he did not think the private investor could do so, but they were looking forward to the establishment of a method that would enable more

than two-thirds to be lent. It was a question as to what institution could be set up which could lend this larger proportion of purchase money. He, for one, did not see that there was any serious objection to its being done.

Mr. Stanley thought it could not be carried out by the State, because of the inconvenience and difficulty that would arise from the State having direct contact with those who desired to borrow; that, again, was not the suggestion made in the Paper. It was the trade bank, or similar institution, which would come into contact with the actual purchaser. He had only suggested that the trade bank should be assisted by the State, because it would be necessary, if the scheme was to be a success, that the bank should lend at the lowest possible rate of interest. Mr. Stanley had also said that he did not think investors would be tempted by an increased rent which would not materialise for ten years. Certainly that might be so, but it must not be forgotten that their interest in the property increased annually, and they would all the time be deriving a distinct advantage. He suggested that it was a practical way out of the difficulty which faced them, and that there was a difficulty could not be denied.

Further, Mr. Stanley thought that private capitalists could not cope with the difficulty of providing increased housing accommodation, and thought the only alternative was the intervention of the municipal authorities, although he regretted that the effect of such intervention would be to restrict the operation of private enterprise. But it was to be feared that when once the matter was handed over to local authorities it would not be the case that private individuals would merely do less, but that private enterprise would disappear altogether, as he did not see how it could compete with public money.

That was a situation which he hoped they would all endeavour to avoid, and for that reason he had suggested that authorities should not themselves undertake the erection of houses, but that they should enable private investors to do so. They would thus secure the means of providing the necessary accommodation, and at the same time save the private investor.

He agreed with Mr. Rushworth, and thought it quite likely that some people would consider him (Mr. Head) a pestilent wrecker. But he was willing to incur even that name, because he felt certain that, in investigating any difficulty, absolute candour was the first necessity. They must both find out and admit what was the matter before they could begin to suggest anything like an effective remedy.

As Mr. Rushworth had said, the most important thing was to maintain their market, and what he had put in an epigrammatic form was really the aim of the whole Paper. It was all directed towards the necessity of preserving the property market as a thing in being; not allowing it to die out by decline from any cause whatever, nor allowing the funds of investors to be attracted into other securities. The general conclusion he had come to, when writing the Paper, was that though there had been a fall in property, the market in which they operated, the great security in which they dealt, had proved itself so sound as to be well able to resist the attacks made upon it. In addition to his inquiries in England he had had reports from France, and they would find the state of things disclosed here was nothing when compared with the dislocation of business which had occurred in the country of our Allies. He thanked them all for their kind attention.

The proceedings then concluded.



GEORGE LANGRIDGE.

President 1906-7.

THE ANNUAL GENERAL MEETING,

Monday, 4th June, 1917.

GEORGE FRANCIS STEWART (President) in the Chair.

The Report of the Scrutineers, appointed at the Ordinary General Meeting of Monday, 16th April, 1917, under the provisions of Article XLII. of the By-Laws, was read to the Meeting.

The Report declared that the following were elected a

COUNCIL FOR THE ENSUING YEAR.

President.

ARTHUR LYON RYDE.

Vice-Presidents.

JOHN HUBERT OAKLEY
ANDREW YOUNG

JOHN WILLMOT
JOSEPH HENRY SABIN

Members of Council.

JOHN MCCLARE CLARK
JAMES INGLIS DAVIDSON
EDWIN SAVILL
EDMUND WALTER RUSH-
WORTH
JOHN DAVID WALLIS
DENDY WATNEY
GEORGE CORDEROY
ERNEST ALFRED RAWLENCE
HERBERT MANSFIELD COBB

EDWARD SAMUEL COX
BERNARD MARR JOHNSON
ERNEST HOLTHAM LEEDER
HENRY HARTLEY
CHARLES HERBERT BEDELLS
CHARLES BOLAM FISHER
FREDERICK ADOLPHUS
BRABAZON TURNER
(*since deceased*).

Professional Associates of Council.

STANLEY HICKS.
JOHN MAUGHAN.

Associates of Council.

SIR JOHN WOLFE BARRY, K.C.B.
GEORGE MALLOWS FREEMAN, K.C.

The Report of the Council on the affairs of The Institution, and the Statement of Receipts and Expenditure for the year 1916 were read.

IT WAS RESOLVED—"That the Report of the Council and the Balance Sheet be received and approved, and be printed and circulated with the *Transactions*."

IT WAS RESOLVED—"That the thanks of The Institution be given to Messrs. H. C. NEWMARCH and H. S. LOGSDON for the efficient performance of their duties as Auditors, and that they be requested to continue their services for the ensuing year."

IT WAS RESOLVED—"That the thanks of The Institution are due and be given to the President, Vice-Presidents, and the other Members and Associates of the Council, for the able manner in which they have administered the affairs of The Institution."

IT WAS RESOLVED—"That the thanks of The Institution are due and be given to Mr. PERCIVALL CUREBY (the Honorary Secretary), to Mr. ALEXANDER GODDARD (the Secretary), and the other Officers of The Institution, for the able manner in which they have executed their several duties."

IT WAS RESOLVED—"That the thanks of the Meeting be given to Messrs. C. J. LAKE, R. B. MANN, C. S. BURKETT-SMITH, GEOFFREY L. VIGERS, and H. S. LOGSDON, for their services as Scrutineers."

The CHAIRMAN presented the following Prizes won by Candidates in the Professional and Preliminary Examinations, 1916:—

THE "PRELIMINARY" PRIZE OF THE VALUE
OF £2 2s.

for the highest number of marks in the Preliminary Examination, 1917, to WILLIAM ARCHIBALD HILL, who obtained 443 marks out of 500.

THE "CONSTRUCTIVE AND WORKING
DRAWINGS" PRIZE OF THE VALUE OF £5 5s.
to HENRY COLBECK, who obtained full marks in the

subject of "Constructive and Working Drawings" in the Intermediate Examination, 1917.

THE "QUANTITIES" PRIZE OF THE VALUE
OF £5 5s.

to GEORGE HENRY ALLISON, who obtained 85 % of the maximum marks in the subject of "Quantities" in the Final Examination, 1917.

THE "BEADEL" PRIZE,

BEING THE INTEREST ACCRUING ON THE SUM OF £200, for the best work in the subject of "Agriculture" in the Intermediate Examination, 1917, to WILLIAM HENRY FORDER, who obtained 73 % of the maximum marks in this subject.

"THE INSTITUTION" PRIZE OF THE VALUE
OF £15 15s.

to ARTHUR HAROLD HALLS, first of the Student Candidates in the Intermediate Examination, 1917, with a total of 726 out of 1,000 marks.

THE SPECIAL PRIZE OF THE VALUE
OF £10 10s.

to ALAN CHARLES GOLDING, second on the pass list of the Student Candidates in the Intermediate Examination, 1917, with a total of 667 out of 1,000 marks.

THE "PENFOLD" SILVER MEDAL

for the highest percentage of marks (over 75 % of the maximum) in the Students' and Non-Students' Divisions of the Intermediate Examination, 1917, to JOHN OWEN PARRY.

He also won

THE "DRIVER" PRIZE,

BEING THE INTEREST ACCRUING ON A SUM OF £500,

for the highest marks gained by a Non-Student Candidate in the Intermediate Examination, 1917. Mr. PARRY obtained 755 marks out of a possible 1,000.

THE "CRAWTER" PRIZE,

BEING THE INTEREST ACCRUING ON A SUM OF £200,

for the best work in the subject of "Principles and Practice of Valuation" in the Final Examination, 1917, to JOHN HENRY WILSON, who obtained 78 % of the maximum marks in the subject.

THE "PENFOLD" GOLD MEDAL

for the highest marks (over 75 % of the maximum) in the Final Examination, 1917, to JOHN CAFFIN WHEELER, who obtained 767 marks out of a maximum of 1,000.

THE "GALSWORTHY" PRIZE,

BEING THE INTEREST ACCRUING ON A SUM OF £500,

awarded to WILLIAM WELLINGTON BERRY, the Candidate in the Final Examination, who, having passed the previous Examination as a Student, is found to have obtained the highest aggregate of marks in the two Examinations combined.

He also won

THE "MELLERSH" PRIZE,

BEING THE INTEREST ACCRUING ON A SUM OF £100,

for the highest marks in the subject of "Forestry, "Timber Valuing, and Measuring (Outdoor)" in the Final Division. Mr. BERRY obtained 81 % of the maximum marks in this subject.

A vote of thanks to Mr. STEWART for his conduct in the chair during his year of office was carried unanimously.

Mr. RYDE, President for the ensuing year, was inducted to the chair and invested by the retiring President with the chain of office.

The proceedings then terminated.

THE FORTY-NINTH
ANNUAL REPORT OF THE COUNCIL.

ANNUAL GENERAL MEETING,

June 4th, 1917.

The Forty-Ninth Annual Report of the Council, the third issued during the period of war, is necessarily largely coloured by the life and death struggle on which the energies of the nation are still concentrated.

The following tables show that the war continues to exercise a marked effect on the membership of The Institution. Since last year, as will be seen from the list given later, the number of those connected with The Institution who have lost their lives on active service has been considerably increased, and in addition to this the demand made by the nation on the youth of the country has for the time being cut off the supply of those who would in normal times have presented themselves for examination and come up for election. This is clearly indicated in the examination lists (see Table D), and in the diminution in the number of Professional Associates and Students, amounting together to 204 out of a total loss of 212.

TABLE A.

	Honorary Members.	Fellows.	Colonial Fellows.	Professional Associates.	Associates.	Probationers.	Students.	Total.
May, 1915	24	2048	72	2860	53	49	328	5434
May, 1916	23	2013	76	2791	51	63	209	5226
May, 1917	22	1998	81	2656	50	67	140	5014
	-1	-15*	+5	-135†	-1	+4	-69	-212

* New Fellows ...	...	76	† New Professional Associates...	28
Resigned or died	...	91	Transferred, resigned, or died	163
		<u>-15</u>		<u>-135</u>

It is worthy of note that for the third time the highest civic honour the country has to offer has been conferred upon a Member of The Institution; in November last Colonel Sir William Dunn, Bart., Fellow, was elected Lord Mayor of London, former Members holding that office having been Sir John Whittaker Ellis, Bart., and Sir David Burnett, Bart. The Council feel sure that Members will appreciate the honour done to their profession, and wish Sir William health to carry through the arduous duties which will fall upon him in his year of office.

One additional Honorary Member has been elected during the year, Sir Richard Redmayne, K.C.B., Chief Inspector of Mines, who has been good enough to interest himself in the formation of the new Mining Sub-Division, and has accepted nomination as a member of the Mining Committee.

All Members will have heard with great regret of

TABLE B.

	Members (or "Fellows" after 1881):	Associates.		Pro- bationers.	Students.	Total.
		Professional.	Ordinary.			
May, 1869 ...	162		38		2	202
" 1870 ...	180		59		2	241
" 1871 ...	190		65		2	259
" 1872 ...	205		67		4	276
" 1873 ...	225		74		5	304
" 1874 ...	247		89		6	332
" 1875 ...	275		101		11	387
" 1876 ...	300		119		8	427
" 1877 ...	310		133		11	454
" 1878 ...	312		134		8	454
" 1879 ...	330		146		10	486
" 1880 ...	342		155		10	507
" *1881 ...	357		164		14	535
" 1882 ...	480		235		7	722
" 1883 ...	557	218	74		38	887
" 1884 ...	666	307	80		58	1121
" 1885 ...	703	317	86		86	1192
" 1886 ...	716	316	84		80	1196
" 1887 ...	741	339	89		108	1277
" 1888 ...	798	333	90		102	1323
" 1889 ...	910	334	89		110	1443
" 1890 ...	1095	310	89		123	1617
" 1891 ...	1374	336	96		140	1946
" 1892 ...	1646	342	97		172	2268
" 1893 ...	1629	353	93		181	2269
" 1894 ...	1626	381	84		204	2309
" 1895 ...	1629	430	83		210	2352
" 1896 ...	1802	465	86		220	2573
" 1897 ...	1808	540	84		252	2684
" 1898 ...	1835	615	85		272	2807
" 1899 ...	1887	686	84		308	2965
" 1900 ...	1883	757	88		336	3064
" 1901 ...	1883	834	89		364	3170
" 1902 ...	1891	906	86		392	3275
" 1903 ...	1897	1025	86		396	3404
" 1904 ...	1886	1140	80		409	3515
" 1905 ...	1893	1312	80		384	3669
" 1906 ...	1878	1502	74		361	3815
" 1907 ...	1832	1638	74		345	3389
" 1908 ...	1819	1786	77		350	4032
" 1909 ...	1821	1876	76		385	4158
" 1910 ...	1862	1970	75		365	4272
" 1911 ...	1904	2105	73		338	4420
" 1912 ...	1937	2271	62		355	4625
" 1913 ...	1963	2633	61		354	5011
" 1914 ...	2000	2967	57		363	5387
" 1915 ...	2048	2860	53	49	328	5338
" 1916 ...	2013	2791	51	63	209	5127
" 1917 ...	1998	2656	50	67	140	4911
Honorary Members ...						22
Colonial Fellows ...						81
1917 Grand Total...						5014

* Since August, 1881, "Members" have been designated "Fellows," and, in 1883, "Associates" were divided into "Ordinary" and "Professional" Associates.

the sudden death, in June last, of Mr. George Langridge, who filled the office of President with so much courtesy and dignity in 1906. Since his election to the Council in 1894 he had been a most regular attendant on the Standing Committees, and had devoted an immense amount of time to the work of The Institution. His sound advice and wide knowledge of rural matters have been greatly missed by his colleagues on the Council. A portrait of Mr. Langridge will be attached to this Report when circulated, and a short account of his professional career has been included among the obituary notices.

Within the last week The Institution has sustained a double loss, which will have caused universal regret among Members. In the first place the Council have to report the death, after an operation, of Mr. Frederick A. B. Turner (1895), a leading Irish land agent and surveyor, who at the recent ballot for Council was selected by Members to fill one of the two vacancies which had to be filled. Mr. Turner had been chairman of the Irish Branch, and no more worthy representative of Ireland could have been chosen for a place on the Council on Mr. Stewart passing the Presidential Chair. Secondly, they must refer officially to the death of Mr. Julian C. Rogers, which took place on Whitsunday after a short illness. It is now twelve years since Mr. Rogers retired from the secretaryship of The Institution, after thirty-six arduous years of office; but his memory is still fresh in the minds of those who knew him, while the work he did in assisting to build up The Institution on a sure and sound foundation will form a permanent record of his ability and devotion.

Other well-known Members whose deaths the Council have regretfully to record, are: Edward Robert Robson,

London, 1872; William Tanner, Monmouthshire, 1884; Henry Northroft, London, 1889; Aubrey Rumball, St. Albans, 1891; Philip Chasemore, Horsham, 1891; William Harpur, Cardiff, 1891; and Herbert Phillips Fletcher, D.S.O., London, 1891, whose death through an aeroplane accident, so soon after the recognition of his distinguished military services by the French Government in the bestowal of the Croix de Guerre, was peculiarly tragic.

Mention must also be made of the loss sustained by The Institution in the death of Mr. W. Cooke Yarborough, for upwards of twenty-five years a member of the staff, whose devotion to the interests of The Institution, and unvarying courtesy to all with whom he came into contact, had endeared him to a wide circle.

FINANCE.

The effect of the war on the finances of The Institution naturally continues. The capital investments have been depreciated to the amount of £2,377, while the income from subscriptions in 1916 showed a further decline of £1,526, due mainly to the largely increased number of Members serving, who are relieved from the payment of their subscriptions until their return to civil life. Careful administration and economies effected in various directions have, however, enabled the year to be completed without the necessity of any call upon capital being made, and the Council are glad again to be able to congratulate Members on the manner in which The Institution's resources have stood the strain of the war.

The Council have thought it right to respond to the national call for financial support in carrying on the

war. During the year covered by the accounts they took up £1,000 Exchequer Bonds, and on the issue of the new War Loan at the commencement of the present year they not only converted their previous holdings in Government Stock, but by arrangement with The Institution bankers took up an additional £5,000 of the Loan. This transaction, however, will not appear in the accounts till the publication of the Balance Sheet for 1917, The Institution financial year being the calendar year, and not that covered by this Report.

TABLE C.

RECEIPTS.			PAYMENTS.		
	£	s. d.		£	s. d.
Revenue Balance—			Total Payments out of		
1st January, 1916	1,697	10 10	Revenue (Current Ex-		
Total Receipts on Re-			penses)	9,134	16 3
venue . . .	10,077	4 6	Purchase of £1,000 6%		
Capital Account . .	311	17 0	Exchequer Bonds	1,000	0 0
			Examinations Account	242	12 0
			Petty Cash in hands of		
			Secretary . . .	50	0 0
			Cash at Bankers and on		
			Current Account	1,659	4 1
	<u>£12,086</u>	<u>12 4</u>		<u>£12,086</u>	<u>12 4</u>

THE EXAMINATIONS.

The military requirements of the country occasioned by the third year of the war were accurately reflected in the number of candidates presenting themselves for examination. If the ten candidates who came up for re-examination in their typical subjects are left out of the reckoning, it is necessary to go back to 1887, only seven years after the examination system was adopted, to find

a smaller total, the number for the year under review, sixty-three, being only one-twentieth of those who sat in the high watermark year, 1913, when the total reached 1,266.

Members will be interested to hear that through the courtesy of the Foreign Office the Council was able to arrange for a prisoner of war, interned in Switzerland, to sit for the Final Examination. They are pleased to be able to report that this candidate satisfied the examiners.

Table D shows the number of candidates and the percentage of passes since the examinations were established, while Table E gives details of the results in the different sub-divisions in the English Examination.

In the Typical Subjects only 10 candidates sat, all of whom were successful.

The number of examinees sitting at Glasgow was 4, of whom 3 entered for the Final and 1 for the Direct Fellowship; of these 2 of the Final candidates were successful, the other 2 candidates being referred back in their Typical Subjects.

At the examination held in Dublin, 2 candidates in the Intermediate Division presented themselves, 1 of whom satisfied the examiners.

THE EXAMINERS.

The following changes among the examiners have taken place: Mr. E. J. Naldrett has kindly consented to act as examiner in the Acts for the Compulsory Purchase of Property in place of Mr. Barnard Lailey, K.C., who has been appointed a county court judge; and Mr. J. L. Crouch, Associate, in the Law of Dilapidations, *vice* Mr. A. B. Howes, who has taken up an appointment in

TABLE D.

Years.	Preliminary Examinations.			Professional Examinations.		
	Candidates.	Passed.	Percentage.	Candidates.	Passed.	Percentage.
1881	13	6	46·15	2	1	50·00
1882	30	17	56·66	—	—	—
1883	44	22	50·00	25	22	88·00
1884	51	30	58·82	36	23	63·89
1885	46	37	80·43	43	31	72·09
1886	46	34	78·26	56	38	67·85
1887	53	39	73·58	58	45	77·59
1888	48	39	81·25	73	52	71·23
1889	51	41	80·39	71	51	71·83
1890	53	44	83·01	96	70	72·91
1891	76	60	78·94	92	68	73·91
1892	83	64	77·10	125	93	74·40
1893	77	57	74·00	149	100	67·11
1894	97	66	68·00	182	129	70·87
1895	121	80	66·11	196	141	71·93
1896	117	78	68·37	212	143	67·45
1897	133	91	68·42	236	151	63·97
1898	127	95	74·80	265	169	63·77
1899	145	112	77·25	290	184	63·44
1900	131	102	77·86	325	193	59·38
1901	142	111	78·45	362	246	67·95
1902	165	133	80·06	369	241	65·30
1903	151	108	71·52	424	294	69·34
1904	152	108	71·05	480	370	77·08
1905	132	88	66·66	505	399	79·00
1906	190	106	55·78	535	349	65·23
1907	171	102	59·64	554	422	76·17
1908	160	106	66·25	468	351	75·00
1909	137	95	69·34	540	356	65·93
1910	130	95	73·08	623	437	70·14
1911	137	92	67·15	768	516	67·18
1912	121	78	64·46	1,102	738	68·76
1913	146	93	63·69	1,266	724	57·19
1914	145	100	68·96	1,095	670	61·19
1915	84	61	72·61	526	290	55·13
1916	44	32	72·72	140	80	57·15
1917	34	26	76·47	73	52	71·23
TOTALS	3,783	2,648	69·99	12,362	8,239	66·65

British East Africa. The Council have to offer the cordial thanks of The Institution to all those who have undertaken this responsible work.

TABLE E.

England and Wales.

	Sub-Division I. Land Agency.			Sub-Division II. Valuation.			Sub-Division III. Building and Quantities.			Sub-Division IV. Mining.			Percentage of Candidates who Passed.
	Examined.	Passed.	Referred Back in Typical Subject.	Examined.	Passed.	Referred Back in Typical Subject.	Examined.	Passed.	Referred Back in Typical Subject.	Examined.	Passed.	Referred Back in Typical Subject.	
Intermediate Examination, Students	1	1	—	4	3	—	3	2	—	—	—	—	75·00
Intermediate Examination, Non-Students	4	3	—	5	3	1	8	6	—	2	2	—	73·68
Final Examination	2	1	—	11	8	2	7	5	—	1	—	1	66·66
Direct Fellowship Examination	2	2	—	2	—	—	5	3	1	—	—	—	55·55
Totals	9	7	—	22	14	3	23	16	1	3	2	1	68·42

The following is a complete list of the examiners:—

MR. J. E. BIDWELL.	MR. H. J. JOHNSON.
MR. THOMAS BINNIE.	MR. F. J. LLOYD.
MR. G. T. BROWN.	MR. W. MCCrackEN
MR. E. F. BUCKLEY.	MR. R. B. MANN.
MR. J. W. WILLIS BUND.	MR. JAMES MATHER.
MR. J. BURY.	MR. J. D. MATHEWS.
MR. C. CHART.	MR. P. T. MAW.
MR. W. A. CHEEKE.	MR. W. MENZIES.
MR. A. B. CLIFF.	MR. R. E. MIDDLETON.
MR. ROBERT COBB.	MR. H. P. MONCKTON.
MR. J. L. CROUCH.	MR. E. C. P. MONSON.
MR. DONALD CURRIE.	MR. E. J. NALDRETT.
MR. J. J. DONE.	MR. T. A. O'DONAHUE.
MR. J. E. DROWER.	MR. E. C. PINKS.
MR. JAMES EDGAR.	MR. R. G. G. REED.
MR. W. H. EVE.	MR. K. ROBINSON.
MR. WILLIAM FRASER.	MR. W. G. S. ROLLESTON.
MR. GORDON T. FREW.	MR. E. SAVILL.
MR. H. FREYBERG.	MR. W. T. SCRUBY.
MR. JOHN GILCHRIST.	MR. SYDNEY A. SMITH.
MR. J. GRIMWOOD.	MR. S. L. THACKER.
MR. M. L. GWYER.	MR. GILBERT THOMSON.
MR. F. H. A. HARDCASTLE.	MR. D. T. THRING.
MR. T. W. A. HAYWARD.	MR. A. VERNON.
MR. EUSTACE HILLS.	MR. H. T. WALES.
MR. WILLIAM H. HOWATT.	MR. ALEXANDER WALKER.
MR. F. HUDLESTON.	MR. A. T. WALMISLEY.
MR. JOHN HUME.	MR. DENDY WATNEY.
MR. F. W. HUNT.	MR. J. WILSON.
PROFESSOR JACKSON.	MR. M. H. YOUNG.

THE PUBLICATIONS.

The reduction in the number of Ordinary General Meetings, inaugurated last Session in order to meet war conditions, has been continued, only six Meetings being held. The first was, as usual, given up to the President's Opening Address, but the following Papers were read at subsequent Meetings: "Suggestions for the Improvement of Cattle Breeding in Great Britain," by Professor K. J. J. Mackenzie, Associate; "The Repopulation of

"our Rural Districts," by Mr. Theodore G. Chambers, Fellow; "Some Notes on the Defence of the Realm " (Acquisition of Land) Act, 1916," by Mr. Edwin Savill, Member of Council; and "The Effect of War " Conditions upon the Property Market (Urban)," by Mr. J. George Head, Fellow. The discussion on Mr. Savill's Paper was carried over to a second Meeting, when the subject was reopened in an able and interesting speech by our Honorary Member, the Right Hon. Lord Parmoor of Frieth, K.C.V.O., &c.

In addition to the *Transactions* two important Reports on Unemployment after the War in Rural and Urban Districts were issued. The Council are pleased to be able to report that these publications aroused a wide interest, as evinced by the great demand for them outside professional circles. They wish to express their thanks to the Members of the Committee responsible for conducting the inquiry, who devoted an immense amount of time and attention to the subjects referred to them. The names of those who acted upon the Committee appeared in the published Reports.

During the year circulars giving information on the following subjects have also been issued: The Government Aircraft Insurance Scheme; the Employment of Clerks of Works for the Measurement of Variations for Settlement of Accounts under Contracts; Relief in respect of Income Tax when the Income has suffered owing to the War; Surveyors' Fees in case of Taxation of Costs; the Agricultural Output; Sole or Sole Remaining Principals in Surveying Firms called up for Military Service; the Registration of Business Names Act, 1916; and National Service.

In view of the increased cost of labour and materials, and the desire expressed by the Government that em-

ployment on non-essentials should be reduced whenever possible, the Council decided to issue a statement of the alterations which had taken place up to 1st January, 1917, in place of the usual List of Members.

THE LIBRARY AND THE FORESTRY MUSEUM.

Beyond the purchase of new editions of standard works, expenditure on the Library has been governed by the same considerations of economy which have prevailed in the administration of other departments of The Institution's affairs. In one direction only has there been any marked extension of the Library. It was thought desirable, in view of the new Mining Sub-Division, that steps should be taken to make the shelves of The Institution as representative of that branch of the profession as it already was in other directions; certain works and official reports have therefore been purchased, while others have been presented through the generosity of mining Members, including a notable gift, from the partners in the firm of Messrs. Lewis & Lewis of Derby, of an entire set of the *Transactions* of The Institution of Mining Engineers. A list of these presentations has already appeared in the Notices to Members, and The Institution is greatly indebted to those who have taken so large a share in bringing the Library up to date in this direction.

A further interesting presentation was made during the year, Mr. Charles Napier, Judge of the High Court of Madras, having presented the portrait in oils of his grandfather, Mr. John Horatio Lloyd, one of the founders of The Institution and an original Associate of Council. The portrait has been hung on the main staircase, opposite that of Sir Edward Boyle, Bt., K.C., M.P. The thanks

of The Institution are due to Mr. Charles Napier for his generous gift.

Developments contemplated in the Forestry Museum have naturally been affected by the war, but considerable progress has been made in several directions. The re-labelling of the timbers with a full detailed description of the character of the tree and its timber has progressed, and several new exhibits of an interesting nature have been added to the collection. The exhibits illustrating the timbers required in the war, which were arranged by the Director of Army Contracts and other Government departments, have now been obtained on permanent loan, and should add considerably to the interest in the Museum.

Another exhibit of timbers from the Museum was arranged and created considerable interest at a large Meeting held at The Institution on Monday, 12th March, to which all those interested in woods were invited. This Meeting was attended by many influential people, including the Director of Timber Supplies (Sir Bampfylde Fuller, K.C.S.I.) and the Director of the Agricultural Section of National Service (Mr. J. Harling Turner, F.S.I.). Several members of the House of Lords and the House of Commons, in addition to landowners and agents, were also present.

Afforestation is likely to be a very prominent subject after the war, and a real effort will be made to make this exhibit the recognised forestry collection of English timbers in London. The Council hope that all Members will do everything possible to attain this object, and will show a practical interest in the Museum by supplying information or submitting specimens likely to prove of value as permanent or temporary exhibits.

THE STANDING COMMITTEES.

Under the above heading an important new departure has been made in the establishment by the Council of a Board of Inquiry for the purpose of inquiring into applications by surveyors for exemption from military service under Section 2 (1) (b) of the Military Service Act, 1916. This Board was originally set up with the object of investigating and reporting upon applications from Members of The Institution who were the sole, or the sole remaining, principals in established businesses; but the military tribunals in the London area quickly recognised the advantages to be gained by means of a judicial inquiry into these cases carried out by a professional body capable of understanding the points upon which applicants based their claims for exemption, and large numbers of cases have been referred to the Board outside the original scope of the undertaking. Since January last 27 sittings have been held, and 94 applications have been investigated. The Board, of course, have no power to grant exemptions, and can only act in an advisory capacity, but the number of cases which have been referred to them affords proof, if proof were needed, that the departure was well advised and met a decided need.

Arrangements were also made, with the co-operation of the Provincial Committees, for similar boards to be established throughout the country, and although the services of these have not been so fully made use of by the tribunals, they have done useful work.

The Council recognised that many cases of hardship must inevitably occur as the national demands under the Military Service Acts became more exacting, and the

following extract from their circular of December last indicates the steps they proposed to take for the assistance of Members in carrying on their businesses during their absence on naval or military service:—

“1. In the event of application for exemption proving unsuccessful, the Members called up for service should, if possible, arrange with other firms to carry on their business. The Council believe that the sympathy naturally felt towards these Members in their difficult situation will facilitate such arrangements, and wherever practicable such a course is strongly advised.

“2. The Council will set up a Court to deal with all questions arising in connection with the maintenance of the businesses of Members called to the Colours.

“3. Where it has not been found possible to make arrangements with another Surveyor to take over the practice, they will endeavour, with the assistance of the Provincial Committee when necessary, to introduce a suitable collaborator. But in so doing they will not be able to accept any responsibility as to the manner in which the business is conducted, except so far as is indicated in the following paragraphs.

“4. The Court, both when the arrangements are privately made, and when a collaborator is introduced, will be prepared—

- (a) To advise generally as to the terms which might be fair between the parties ;
- (b) To advise in matters of difficulty which may arise during the absence of the principal ;
- (c) To adjudicate upon any differences which may arise between the two parties to the arrangement, provided that an undertaking to submit such differences to the Court is entered into by the parties beforehand.

“5. Members who would be prepared to help those called up for service by carrying on their practices in their

absence, are asked to inform the Secretary, 12, Great George Street, S.W., in order that a list of those available may be drawn up."

A Committee representing the Mining Sub-Division has been set up, Sir Francis Brain being its first elected chairman. Although its activities have been necessarily limited by the war, it has done useful work in recommending candidates for election with the object of strengthening this branch of The Institution; in advising on the syllabus of the Mining Examination; on the additions to the Library needed to make it representative of the mining side of the profession; and in making arrangements for bringing up to date the information on mining royalties collected by the Royal Commission. This latter work is now in process of being carried out.

Apart from the circular on the Employment of Clerks of Works for the Measurement of Variations, already referred to under the heading "Publications," the Quantity Surveyors' Committee have been actively engaged in pressing upon the Government departments concerned the desirability, in the cause of national economy, of quantities being provided in respect of the permanent and semi-permanent buildings erected in such large numbers for purposes connected with the war; and the impropriety of their taking advantage of the lack of work arising from the prohibition on building to obtain the services of surveyors at rates of remuneration which before the war would have been looked upon as inadequate.

In addition to the ordinary administration of The Institution affairs, and the matters dealt with in the circulars and reports which have been issued to Members, the following subjects have come under the considera-

tion of the Standing Committees during the year: The Telegraph Construction Bill, the Defence of the Realm (Acquisition of Land) Bill, the Courts Emergency (Amendment) Bill, the Food Production Bill, and the amendment of the Agricultural Holdings Act, while a special Committee is still inquiring into the Shortage of Housing Accommodation for the Working Classes.

THE PROVINCIAL COMMITTEES.

Although the meetings of the Provincial Committees have necessarily been affected by the prevalence of war conditions, and by the additional demands made upon the time of Members owing to shortage of staff and the voluntary work which they have undertaken in so many directions, the Council wish to acknowledge the support they have received from Members in all parts of the country in connection with their scheme for dealing with applications for exemptions under the Military Service Act, and their inquiry into the working of the Agricultural Holdings Act; and more particularly would they thank the local Committees for their response to the appeal which was issued in December last for the assistance of surveyors in helping the County War Agricultural Committees to organise and increase the output of home-grown food and timber. In every direction Members appear to be taking an active part in this important national work, and the Council are pleased to be able to report that the information they have received indicates that the profession has fully realised its responsibilities and opportunities in this connection.

The Institution is in particular indebted to the Chairmen and Secretaries of the Committees for their

co-operation at the time when so many calls are made upon them in these matters, and also for the expeditious manner in which they have dealt with the many questions referred to them in connection with the examinations and applications for transfer to the fellowship.

The following table gives the names of the Chairmen and Honorary Secretaries, together with the names of Members of each local Committee.

TABLE F.

Committee.	Chairman.	Hon. Secretary.	Number of Members.
Northumberland and Durham	Geo. T. Brown	C. McGhie	105
Cumberland and Westmorland	F. B. Punchard	T. Brown, Jun.	40
Lancashire and Cheshire ...	H. Swetenham	J. H. Hall	337
Yorkshire	R. E. Horsfall	H. Hanson	251
Salop and Hereford and Mid-Wales	W. T. Hall	A. M. Hickman	58
Nottingham, Lincoln, and North Derby	W. H. Pain	E. J. Turton	100
South Wales and Monmouth	E. H. Leeder	F. H. Osmond-Smith	157
Warwick, Worcester, Stafford, and South Derby	John Willmot	E. G. Bigwood	223
Leicester, Northampton, and Rutland	C. B. Fisher	M. T. Woolley	67
Cambridge, Huntingdon, Norfolk, and Suffolk	Henry Donne	L. G. Hawkins	135
Berks, Bucks, and Oxon ...	H. D. Buckland	M. C. Duchesne	109
Beds, Essex, Herts, and Middlesex	C. P. Hall	A. W. Merry	312
Devon and Cornwall ...	Daniel Ward	J. F. Bowden	106
Somerset, Glo'ster, and North Wilts	J. J. Harle	R. H. King Price	144
Hants, Dorset, and South Wilts	Ernest Fox	R. C. Barrow	208
Kent	Henry Dann	R. Cobb	198
Surrey	Charles Osenton	C. F. Slater	226
Sussex	H. G. B. Wyatt	H. G. B. Wyatt	120
North Wales	W. E. Jones	J. M. Porter	36
Irish Committee	Fane Vernon	B. J. Newcombe	158
Scottish Committee	J. I. Davidson	W. Fraser	226

THE EUROPEAN WAR.

The number of those connected with The Institution now known to be serving in His Majesty's Forces is 2,240, viz.: 271 Fellows, 1,402 Professional Associates, 7 Associates, 15 Colonial Fellows, and 545 Probationers, Students, and Examination Candidates. In addition to these, 7 members of the staff are serving, while one, Mr. Potter, the book-keeper, has now, to the Council's great regret, been missing for nearly twelve months, and any hope of favourable news that might then have existed must now, it is feared, be relinquished.

The year has brought with it a number of military distinctions to Members of The Institution. Apart from mention in the despatches, the following honours are known to have been gained, though the list is doubtless incomplete: Two C.M.G.s, seven D.S.O.s, one M.V.O., an Order of St. John of Jerusalem, one Distinguished Conduct Cross, thirty-six Military Crosses, three Distinguished Conduct Medals, one Military Medal, and one Meritorious Service Medal. In four cases foreign distinctions have been awarded: The Croix de Guerre of France, the Russian Order of St. Anne with Swords (Third Class), the Serbian Order of the White Eagle, and the King of Serbia's Gold Medal.

But the list of those whose names are recorded upon the Roll of Honour as having lost their lives on active service is also long, and comprises the following Members, in addition to the sixty whose names have appeared in previous reports:—

ROLL OF HONOUR.

Name.	Rank and Regiment.	Previous Position.
G. C. ANTHONY (P.A.) ...	L.-Corpl., Royal Fus.	Valuation Department, Inland Revenue.
R. D. APPS (Examinee) ...	Lieut., Royal Berkshire Regt.	
O. V. ARNOLD (P.A.) ...	2nd Lieut., Worcester- shire Regt.	In private practice.
J. N. BEATSON (Examinee) ...	Corpl., Royal Scots ...	Valuation Department, Inland Revenue.
R. N. BELL (P.A.) ...	2nd Lieut., Durham L.I.	Valuation Department, Inland Revenue.
A. L. BERRY (P.A.) ...	2nd Lieut., Royal Fus.	
E. J. BESENT (Prob.) ...	Sapper, Royal En- gineers	Messrs. Lemon & Blizard, Southampton.
P. A. BICK (P.A.) ...	2nd Lieut., Royal Irish Regt.	London County Council.
ALEXANDER BROWN (P.A.) ..	Pte., Scottish Rifles ...	Wishaw Town Council.
G. O. BRUNWIN-HALES (P.A.)	Capt., Essex Regt., at'd. R.F.C.	Agent to Mr. Christopher Turnor.
A. G. CAHILL (P.A.) ...	2nd Lieut., 3rd City of London Regt., Royal Fus.	Valuation Department, Inland Revenue.
A. V. CAIN (P.A.) ...	2nd Lieut., Hampshire Regt.	Hampshire County Council.
H. E. CARRINGTON (P.A.) ...	Capt., Hampshire Regt.	Valuation Department, Inland Revenue.
A. R. H. CHESSALL (Examinee)	Pte., London Regt. ...	Valuation Department, Inland Revenue.
F. S. CHESTERTON (F.S.I.) ...	2nd Lieut., R.F.A. ...	Messrs. Chesterton & Sons, London.
E. R. CHILWELL (P.A.) ...	2nd Lieut., Duke of Cornwall's L.I.	Messrs. Tyser, Green- wood & Co., London.
R. C. COLLISTER (Student) ...	Pte., King's Liverpool Regt.	Mr. W. R. Kay, Douglas, I.O.M.
E. T. COVINGTON (Student) ...	2nd Lieut., East Surrey Regt.	Articled to Mr. F. J. Rogers, London.
J. B. CUBEY (P.A.) ...	Capt., Northumberland Fus.	Valuation Department, Inland Revenue.
C. W. J. DAVISON (P.A.) ...	2nd Lieut., West Yorks. Regt.	Valuation Department, Inland Revenue.
L. M. DELL (P.A.) ...	2nd Lieut., King's Shropshire L.I.	Valuation Department, Inland Revenue.
J. P. EDWARDS (P.A.) ...	L.-Corpl., Royal Fus.	London County Council.
E. C. ELMHIRST (Student) ...	2nd Lieut., Duke of Wellington's Regt.	Messrs. Fennell & Green, Wakefield.

ROLL OF HONOUR—(continued).

Name.	Rank and Regiment.	Previous Position.
A. EVERSLED (P.A.)	Lieut., North Staffs. Regt.	Mr. John German, Ashby-de-la-Zouch.
H. P. FLETCHER, D.S.O. (F.S.I.)	Major, Middlesex Hussars, att'd. R.F.C.	In private practice.
N. R. FOSTER (P.A.)	Lieut., Cheshire Regt.	Valuation Department, Inland Revenue.
A. GODFREY-PAYTON (P.A.) ...	Capt., Royal Warwickshire Regt.	Valuation Department, Inland Revenue.
G. A. GOODY (P.A.)	2nd Lieut., King's Royal Rifles	Uckfield Agricultural College.
P. G. GRAHAM (P.A.)	Capt., 16th Bn. Northumberland Fus.	Mr. F. M. Dryden, Newcastle-on-Tyne.
E. M. GREGSON (Student) ...	Capt., Loyal North Lancs. Regt.	Mr. G. E. Gregson, Preston.
R. L. R. GROGAN (P.A.)	2nd Lieut., Royal Engineers	Messrs. H. Grogan & Co., London.
A. H. GROSER (P.A.)	2nd Lieut., Royal Welsh Fusiliers	General Valuation Office, Dublin.
A. H. HACK (P.A.)	Lieut., King's Own Yorkshire L.I.	Messrs. Vigers & Co., London.
R. S. HAMMERTON (P.A.) ...	Trooper, Duke of Cambridge Hussars	Messrs. Tarrant, Bryans & Co., Weybridge.
L. R. HARGREAVES (P.A.) ...	Capt., Irish Guards ...	
W. G. HAY (P.A.)	Lieut., Black Watch	Mr. Joseph Stower, London.
A. C. HITCHINGS (Student) ...	L.-Corpl., Royal Warwickshire Regt.	Articled to Surveyor to Kingswinford, R.D.C.
C. J. HOMER (Student)	Corpl., Royal Warwickshire Regt.	Articled to Mr. J. Kirkham Dale, Birmingham.
THOMAS HOOD (F.S.I.)	2nd Lieut., Suffolk Regt.	Gharbieh Land Co., Egypt.
R. H. HOOLE (P.A.)	2nd Lieut., Queen's R. W. Surrey Regt.	Valuation Department, Inland Revenue.
G. P. HORNBY (P.A.)	2nd Lieut., Suffolk Regt.	Mr. J. J. Hornby, Knowsley, Prescott.
NORMAN HOWARD (P.A.) ...	Pte., Royal Fus. ...	Messrs. J. Jackson & Sons, Bolton.
J. H. HUGHES (P.A.)	2nd Lieut., Royal West Kent Regt.	Messrs. Hooker & Webb, Croydon.
S. F. HUMPHRYS (P.A.)	2nd Lieut., Royal Fus.	Messrs. G. Trollope & Sons.
B. IRELAND (Student)	Pte., East Yorks. Regt.	Articled to Messrs. Runton & Barry, Hull.
E. C. JARVIS (P.A.)	Capt., South Lancs. Regt.	
W. M. JENKINS (Examinee) ...	Lieut., Welsh Regt. ...	
A. L. KENNAWAY (P.A.)	Lieut., Dorsetshire Yeomanry	Messrs. Eden, Baines & Kennaway, Sherborne.

ROLL OF HONOUR—(continued).

Name.	Rank and Regiment.	Previous Position.
C. H. LISTER (P.A.) ...	L.-Corpl., Royal Engineers	Valuation Department, Inland Revenue.
S. W. LUDLOW (Student) ...	Capt., Royal Warwickshire Regt.	Messrs. Walter Ludlow & Briscoe, Birmingham.
D. R. McDougall (P.A.) ...	Pte., London Scottish	Partner in firm of Messrs. Waterer & Dickins, Bromley.
G. R. B. MAZENGARB (Student)	2nd Lieut., East Surrey Regt.	Articled to Mr. H. W. Longdin, Surveyor to Penge U.D.C.
CHARLES MANN (P.A.) ...	Pte., 2nd Batt. City of London Regt.	Messrs. Potter, Hampstead.
G. L. S. MARNER (P.A.) ...	Lieut., Leicestershire Regt.	Metropolitan Asylums Board.
H. S. MATHEWS (P.A.) ...	Lieut., Royal Warwickshire Regt.	Partner in firm of Messrs. J. Mathews & Sons, Birmingham.
L. P. MILES (P.A.) ...	2nd Lieut., Royal Fus.	Messrs. Sedgwick, Son & Weall, Watford.
H. P. MOLE (Student) ...	2nd Lieut., Royal Sussex Regt.	Messrs. Harrie Stacey & Son, Redhill.
E. R. NELSON (P.A.) ...	Gunner, R.F.A. ...	Valuation Department, Inland Revenue.
J. C. B. OGDEN (Student) ...	Sapper, Royal Engineers	Articled to Messrs. Cook & Edwards, Bridgend.
H. E. OSBORNE (P.A.) ...	2nd Lieut., Welsh Regt.	Valuation Department, Inland Revenue.
W. H. OSTLER (P.A.) ...	Pte., H.A.C. ...	Valuation Department, Inland Revenue.
A. H. PAGE (Examinee) ...	2nd Lieut., Suffolk Regt.	Messrs. Strutt & Parker, London.
C. H. PAIN (P.A.) ...	Pte., 9th Bn. Canadian Rifles	
M. H. D. PARSONS (F.S.I.) ...	Capt., Royal Horse Artillery	Valuation Department, Inland Revenue.
T. S. PATERSON (P.A.) ...	Lieut., Royal Garrison Artillery	Messrs. Paterson & Thomas, Liverpool.
K. G. PERRY (P.A.) ...	2nd Lieut., Royal Sussex Regt.	Estate Office, L.B. & S.C. Railway.
H. S. PHILIPS (P.A.) ...	2nd Lieut., Essex Regt.	Surveyor's Department, Scotland Yard.
S. V. PHILLIPS (P.A.) ...	2nd Lieut., Leicestershire Regt.	Valuation Department, Inland Revenue.
J. F. PRESTIDGE (Student) ...	Lieut., Suffolk Regt. ...	Mr. E. Meacher, Penmaenmawr.
A. D. PROSSER (P.A.) ...	2nd Lieut., Canadian Infantry	
W. S. READ (P.A.) ...	Trooper, Royal Bucks. Yeomanry	Mr. Stratfold Read, Princes Risborough.

ROLL OF HONOUR—(continued).

Name.	Rank and Regiment.	Previous Position.
L. N. ROGERS (F.S.I.)	Capt., Northumberland Fus.	Partner in firm of Messrs. Rogers, Chapman & Thomas, London.
C. J. ST. QUINTIN (P.A.)	2nd Lieut., H.A.C.	Messrs. St. Quintin, Son & Stanley, London.
WILLIAM SALTER, M.C. (P.A.)	Capt., Middlesex Regt.	G.E. Railway Land Agent's Office.
CLEMENT SAUNDERS (P.A.)	2nd Lieut., R.F.A.	Valuation Department, Inland Revenue.
A. W. SEWILL (P.A.)	Lieut., West Yorks. Regt.	Messrs. Buckland & Garrard, London.
J. S. SHOTTON (P.A.)	Pte., Royal Fus.	Messrs. J. White & Co., Warrington.
A. F. S. SMALLMAN (P.A.)	2nd Lieut., H.A.C.	Messrs. Debenham, Tewson & Chinnock.
J. N. G. STAFFORD (P.A.)	Capt., Royal Warwickshire Regt.	Messrs. Stone, Hooper & Pickard, Birmingham.
T. D. STRATHERN (P.A.)	2nd Lieut., Yorkshire Regt.	Agent for Grimeshill Estate, Kirkby, Lonsdale.
JOHN TAYLOR (P.A.)	2nd Lieut., Royal Engineers	
H. C. TOWER (P.A.)	Capt., R.F.C.	Messrs. Eden, Baines & Kennaway, Sherrborne.
N. H. TRELEAVEN (Student)	2nd Lieut., Prince of Wales' Own, West Yorkshire Regt.	Mr. J. Mitchell, Carlisle.
OSCAR TYRELL (P.A.)	Lieut., London Regt.	Messrs. Daniel Smith, Oakley & Garrard, London.
C. D. H. VANSTONE (P.A.)	2nd Lieut., 15th Bn. Rifle Brigade	Teignmouth U.D.C.
DENHAM WALKER (P.A.)	Lieut., East Lancs. Regt., attd. M.G.C.	Mr. Francis Ellis.
S. S. WALKER (P.A.)	Capt., East Yorks. Regt.	Valuation Department, Inland Revenue.
M. M. WEBB (P.A.)	Capt., London Regt.	Messrs. Buckland & Garrard, London.
H. C. WEBB (Examinee)	Capt., Border Regt.	Agricultural College, Aspatria.
L. S. WHITTINGHAM (P.A.)	2nd Lieut., Royal Welsh Fus.	Valuation Department, Inland Revenue.
A. H. WOODROW (P.A.)	Pte., Argyll & Sutherland Highlanders	Valuation Department, Inland Revenue.
WALTER WRENNALL (F.S.I.)...	Bombardier, South African Fld. Artillery	City Surveyor's Office, Cape Town.

The Council, on behalf of The Institution, have in each case conveyed to the relatives of those who have fallen their heartfelt sympathy with them in their irreparable loss, and have expressed their pride in the gallant manner in which those gentlemen have freely given their lives for their country.

MISCELLANEOUS.

Besides the matters already referred to under previous headings, the Council have dealt with many others. The serious agricultural position has been the subject of correspondence between them and the Board of Agriculture, and they have also made suggestions to that department for meeting the difficult questions which must arise in connection with the breaking up of grass-land. Their opinion has also been asked as to whether tenants of agricultural land whose hay or straw was commandeered for military purposes were bound by the ordinary rules requiring an equivalent in manorial value to be returned, a question they answered in the affirmative.

Members of the Council have been called in to advise the Forestry Sub-Committee of the Reconstruction Committee on the acquisition of land for planting; while others have conferred with the War Office authorities on questions connected with the taking of houses and land for military purposes.

Before the war the question of the rank given to officers of the Royal Engineer Services, which is merely honorary and not substantive, was the subject of communications between the Council and the War Office authorities. With the mobilisation of this branch of the Army on the outbreak of war, and its subsequent

augmentation by the appointment of a large number of architects and surveyors as inspectors of works, the question became more acute, and has been the subject of strong representations made jointly by the Royal Institute of British Architects and The Institution. It is to be regretted that up to the present the justice of placing these services in a position similar to that occupied by other non-combatant branches of the Army has not been recognised.

The Council was represented at the deputation to the President of the Local Government Board in October last on the subject of the traffic problem in the metropolis, and the urgent necessity of steps being taken to carry out the scheme of arterial roads which had been approved by authorities from all parts of Greater London. The representatives of The Institution drew attention to the rapid development of building estates in the east of London since the commencement of the war, and laid stress on the importance of powers being given to some authority for the purpose of definitely fixing the routes of these roads if the opportunity for carrying out this much needed improvement was not to be lost.

Communications have been addressed to the Petrol Control Committee urging the claims of Members responsible for the management of large areas of agricultural land and woodlands to be placed in a favoured category with regard to licences for petrol. While the Committee expressed their regret that they were unable to classify Members for special treatment, they stated that they were prepared to consider cases of hardship which might arise with regard to agents and surveyors coming within the above description.

The Council took part in two interesting conferences connected with examinations, one at the Board of

Education, called by the promoters of the British Prisoners of War Book Scheme (Educational), having for its object the provision of the means for prisoners of war to continue their professional studies and, possibly, to complete their examinations; and the other called by the Teachers' Registration Council for the purpose of co-ordinating and systematising the entrance examinations of professional and educational bodies.

It having come to the notice of the Council that Army Form B. 199, dealing with the record of services of officers coming up for promotion, referred to the Certificate in Surveying issued by the Royal Geographical Society, while making no mention of that of The Institution, they drew the attention of the War Office authorities to the omission. A promise to rectify this omission was at once given.

An important communication was received in January last from the Director-General of the Survey of Egypt, asking whether The Institution would be prepared to co-operate with his department by keeping a list of candidates qualified to fill posts on his staff. Details of the arrangement have still to be settled, but the Council have expressed their readiness to place the resources of The Institution at the service of the Director-General in organising such a scheme.

During the year Members of The Institution have been selected to fill a number of important official posts, among which may be mentioned: Member of the Royal Commission for investigating the charges against Sir John Jackson & Co. in connection with the erection of Army huts; Members of the Advisory Committee on agricultural matters set up by the President of the Board of Agriculture and Fisheries; Agricultural Adviser

to the Board of Agriculture; Supervisor for England and Wales of claims made against the Board through the County War Agricultural Committees; Director and Commissioners of the Agricultural Section National Service Department; Director of Lands to the War Office and Ministry of Munitions; Consulting Surveyors to the Lands Department of the War Office and Ministry of Munitions; Members of the Timber Advisory Committee; Members of the Agricultural Policy Subcommittee of the Reconstruction Committee, the hon. secretaryship of which body was accepted by the Secretary of The Institution. The Council desire specially to mention the service which Mr. Goddard has rendered by acting as hon. secretary to this important Committee, and by placing his valuable experience at its disposal and devoting much time to its work.

The use of The Institution rooms has been given without charge in a large number of cases for official conferences and committees connected with the war, and also for meetings of societies having kindred interests with The Institution, the numbers being fifty-seven of the former and twenty-eight of the latter during the year.

ADDENDUM.

In view of the small number of candidates who presented themselves for the professional examinations, the examiners have not, as a rule, found it possible to draw any general conclusions on the work done. It has, therefore, been decided not to issue the usual *précis* of the examiners' reports.

LIST OF STANDING COMMITTEES FOR THE
SESSION 1916-17.

BUILDING.	COUNCIL SELECTION.	
Barry, Sir J. W.	Bidwell, C.	Stewart, G. F.
Bedells, C. H.	Brain, Sir Francis	Currey, P.
Clarke, H. C.	Clarke, H. C.	
Corderoy, G.	Hanson, J. H.	COUNTY DISTRICTS
Freyberg, H.	Martin, H.	AND COUNTRY
Johnson, B. Marr	Oakley, J. H.	MEETINGS.
Martin, Howard	Rolleston, Sir J.	
Ryde, A. L.	Ryde, A. L.	Brown, George Thomas
Stenning, Sir A.	Sabin, J. H.	Dann, H.
Thompson, Sir R.	Stenning, Sir A.	Hanson, J. H.
Vernon, A.	Strutt, Hon. E. G.	Martin, H.
Watney, Daniel	Vernon, A.	Pain, W. H.
Watney, Dendy	Vigers, L. R.	Rawlence, E. A.
Stewart, G. F.	Wallis, J. D.	Strutt, Hon. E. G.
Currey, P.	Watney, Daniel	Swetenham, H.
	Willmot, John	Watney, Daniel
	Young, A.	Wyatt, H. G. B.
		Stewart, G. F.
		Currey, P.

LIST OF STANDING COMMITTEES—(continued).

DINNER.

Bidwell, C.
 Martin, H.
 Watney, Daniel
 Stewart, G. F.
 Currey, P.

EDUCATION.

Brown, George Thomas
 Brown, W. Forster
 Buckland, H. D.
 Clark, J. M.
 Clarke, H. C.
 Corderoy, G.
 Cox, E. S.
 Davidson, J. I.
 Fox, Ernest
 Freyberg, H.
 Hanson, J. H.
 Hartley, H.
 Horne, W. E., M.P.
 Leeder, E. H.
 Martin, H.
 Oakley, J. H.
 Ryde, A. L.
 Sabin, J. H.
 Thompson, Sir R.
 Vernon, A.
 Vigers, L. R.
 Wallis, J. D.
 Young, A.
 Stewart, G. F.
 Currey, P.

ELECTIONS.

Clarke, H. C.
 Cox, E. S.
 Davidson, J. I.
 Hanson, J. H.
 Hartley, H.
 Hicks, Stanley

Jones, Thomas
 Leeder, E. H.
 Martin, H.
 Oakley, J. H.
 Ryde, A. L.
 Sabin, J. H.
 Savill, E.
 Stenning, Sir A.
 Strutt, Hon. E. G.
 Thompson, Sir R.
 Vigers, L. R.
 Wallis, J. D.
 Willmot, J.
 Stewart, G. F.
 Currey, P.

FINANCE.

Horne, W. E., M.P.
 Jones, Thomas
 Martin, H.
 Rolleston, Sir J.
 Rushworth, E. W.
 Sabin, J. H.
 Strutt, Hon. E. G.
 Thompson, Sir R.
 Stewart, G. F.
 Currey, P.

FORESTRY.

Bidwell, C.
 Cobb, H. M.
 Cox, E. S.
 Duchesne, M. C.
 Maughan, J.
 Oakley, J. H.
 Rawlence, E. A.
 Rolleston, Sir J.
 Savill, E.
 Somerville, Dr. W.
 Strutt, Hon. E. G.
 Watney, Daniel

Wood, L. S.
 Young, A.
 Stewart, G. F.
 Currey, P.

LIBRARY AND
SESSIONAL PAPERS.

Bedells, C. H.
 Martin, H.
 O'Donahue, T. A.
 Rushworth, E. W.
 Sabin, J. H.
 Savill, E.
 Vigers, L. R.
 Watney, Daniel
 Watney, Dendy
 Young, A.
 Stewart, G. F.
 Currey, P.

MINING SURVEYORS.

Amstrong, H.
 Brain, Sir F. W. T.
 Brown, W. Forster
 Childe, H. S.
 Clarke, H. C.
 Forster, T. E.
 Geddes, C. D.
 Greaves, P. C.
 Hanson, J. H.
 Jones, Thomas
 Leech, A. H.
 Lewis, Col. G. A., C.M.G.
 O'Donahue, T. A.
 Redmayne, Sir R.
 Turner, D. N.
 Wales, H. T.
 Wallis, J. D.
 Wallwork, J.
 Willmot, J.

1916.	ASSETS				BALANCE SHEET,					
					£	s.	d.	£	s.	d.
Cash at Bankers and in hands of Secretary :—										
Current Account (including £50 Petty Cash)				...	709	4	1			
" " on deposit at Bankers				...	1,000	0	0			
Library, Forestry, and Geological Account				...	418	5	5			
"Prize Endowment" Capital Account				...	0	14	9			
"Prize Endowment" Income Account				...	115	11	0			
								2,243	15	3
Furniture				...				1,467	15	4
Library, Forestry, and Geological Account				...				3,655	5	7
INVESTMENTS :—										
The Leasehold Premises (999 years from 1893)										
No. 11, Great George Street, S.W., at cost				...				20,230	19	8
£	s.	d.								
3,314	18	7	India 3 % Stock at 57½	...	1,906	1	8			
3,399	4	4	New South Wales 3 % Inscribed Stock	...						
			at 70	...	2,379	9	0			
1,990	17	4	War Loan 4½ % Inscribed Stock at 98	...	1,951	1	0			
1,240	3	1	Metropolitan Water Board 3 % B Stock	...						
			at 60	...	744	1	10			
1,811	1	11	New South Wales 4 % Inscribed Stock	...						
			at 81	...	1,466	19	9			
1,000	0	0	6 % Exchequer Bonds at par	...	1,000	0	0			
								9,447	13	3
Library, Forestry, and Geological Account.										
£	s.	d.								
1,952	14	2	War Loan 4½ % Inscribed Stock at 98	...	1,913	13	1			
401	16	9	West Australian Government 4 %	...						
			Inscribed Stock at 80	...	321	9	5			
								2,235	2	6
£	s.	d.	Prize Endowment Account.							
503	1	11	India 3 % Stock at 57½	...	289	5	7			
278	0	3	Midland Railway 2½ % Debenture Stock	...						
			at 50	...	139	0	1			
254	0	0	North British Railway 4 % No. 1	...						
			Preference Stock at 74	...	187	19	2			
304	14	1	War Loan 4½ % Inscribed Stock at 98	...	298	12	2			
440	10	8	India 3½ % Stock at 66½	...	292	19	1			
500	0	0	Courage & Co. 3½ % B Debenture	...						
			Stock at 60½	...	302	10	0			
100	0	0	5 % Exchequer Bonds, 1920, at 98½	...	98	2	6			
								1,608	8	7
£	s.	d.	Scholarship Account.							
2,776	11	6	War Loan 4½ % Inscribed Stock at 98	...	2,721	0	10			
1,988	1	7	Metropolitan Water Board 3 % B Stock	...						
			at 60	...	1,192	16	11			
2,324	14	0	New Zealand 4 % Inscribed Stock	...						
			(1943-63) at 80½	...	1,871	7	3			
1,813	3	0	Queensland 4 % Inscribed Stock	...						
			(1940-50) at 82½	...	1,495	17	0			
								7,281	2	0
£	s.	d.	Penfold Scholarship Account.							
1,600	0	0	Canadian Pacific Railway 4 % Debenture Stock at 79*	...						
								1,264	0	0
Amounts due, but not received at date, viz. :—										
Subscriptions and Entrance Fees				...	1,187	11	0			
Hire of Rooms				...	54	17	3			
Rent of Offices (Tribunal of Appeal)				...	33	5	0			
Rent of No. 11, Great George Street				...	225	0	0			
								1,500	13	3
* Deposited with the Treasury under Scheme B.										
								£50,934	15	5

31st DECEMBER, 1916.

LIABILITIES.

1916.

	£	s.	d.
Accumulations Account	33,464	2	9
Library, Forestry, and Geological Account	6,308	13	6
"Prize Endowment" Capital Account	1,609	3	4
"Prize Endowment" Income Account	115	11	0
Scholarship Account—General	7,281	2	0
" " " " Penfold "	1,264	0	0
Sundry Creditors, Due to	892	2	10

We report that with the assistance of the Chartered Accountant we have examined the foregoing Accounts, and have obtained all the information and explanations that we have required; and in our opinion such Accounts are correct. The foregoing Balance Sheet is properly drawn up so as to exhibit the true and correct state of The Institution according to the best of our information and the explanations given to us and as shown by the books of The Institution.

H. C. NEWMARCH,

H. STEWART LOGSDON,

Auditors.

13th March, 1917.

We have examined the receipts and payments affecting the Accounts for the year ended December 31st, 1916, and find the same in good order and vouched. We have also examined the Deeds and Securities, and certify that they were in possession and safe custody as on 31st December, 1916.

TANSLEY WITT & CO.

5, Chancery Lane, W.C.

13th March, 1917.

£50,934 15 5

RECEIPTS.

FOR THE YEAR ENDED

1916.		£	s.	d.	£	s.	d.	£	s.	d.
Jan. 1st.	To Cash at Bankers on Current Account ...							647	10	10
	„ Do. do. on Deposit ...							1,000	0	0
	„ Petty Cash in hands of Secretary ...							50	0	0
INCOME ACCOUNT :—										
Dec. 31st.	To 1,649 Fellows' Subscriptions at £3 3s.	5,194	7	0						
	„ 56 Fellows' Subscriptions, Arrears at £3 3s. ...	176	8	0						
	„ 46 Fellows' Subscriptions in advance for 1917 at £3 3s. ...	144	18	0						
	„ 2 Fellows' Subscriptions on reinstatement at £3 3s. ...	6	6	0						
	„ 15 Differences of Subscription on Transfer at £1 1s. ...	15	15	0						
					5,537	14	0			
	„ 1,305 Professional Associates' Subscriptions at £2 2s., and 1 Part Payment at £1 1s. ...	2,741	11	0						
	„ 142 Professional Associates' Subscriptions, Arrears at £2 2s., and 1 Part Payment at £1 1s. ...	299	5	0						
	„ 18 Professional Associates' Subscriptions in advance for 1917 at £2 2s. ...	37	16	0						
	„ 8 Professional Associates' Subscriptions on reinstatement at £2 2s. ...	16	16	0						
					3,095	8	0			
	„ 58 Students' Subscriptions at £1 1s.	60	18	0						
	„ 8 Students' Subscriptions in advance for 1917 at £1 1s. ...	8	8	0						
								69	6	0
	„ 29 Probationers' Fees at £1 1s. ...							30	9	0
	„ Hire of Rooms ...							333	17	0
	„ Public Trustee Guarantees ...							0	1	7
	„ Dividends and Interest ...							428	16	4
	„ Rent of Leasehold Property, No. 11, Great George Street, S.W. ...	540	0	2						
	„ Less Ground Rent on the same ...	280	10	0						
								259	10	2
								9,755	2	1
SCHOLARSHIP ACCOUNT :—										
	To Dividends ...				322	2	5			
	„ Transferred from Penfold Scholarship Account ...				67	14	8			
								389	17	1
CAPITAL ACCOUNT :—										
	To 33 Fellows' Entrance Fees at £5 5s. ...	173	5	0						
	„ 27 Fellows' Differences of Entrance Fee at £2 2s. ...	56	14	0						
					229	19	0			
	„ 26 Professional Associates' Entrance Fees at £3 3s. ...				81	18	0			
								311	17	0
								£12,154	7	0

31ST DECEMBER, 1916.

PAYMENTS.

	£	s.	d.	£	s.	d.	£	s.	d.
By <i>Referees' Decisions</i> : Reporting and Publication				77	0	7			
„ <i>Transactions</i> : Reporting and Publication				356	0	6			
„ <i>Professional Notes</i> : Reporting and Publication				292	18	5			
„ Salaries and Pensions				3,215	12	6			
„ Wages and Pension				332	10	5			
„ Postage and Receipt Stamps, General... ..	248	16	0						
„ „ „ <i>Transactions</i>	136	19	5						
„ „ „ <i>Professional Notes</i>	89	17	11						
„ „ „ <i>Referees' Decisions</i>	22	10	8						
				498	4	0			
„ Rates, Taxes, Corporation Duty, and Insurance	1,492	9	5						
„ Staff Endowment Insurance	309	11	6						
				1,802	0	11			
„ Fuel, Light, and Water				274	6	4			
„ Ground Rent, <i>less</i> Tax	892	12	6						
<i>Less</i> Amount received from the Tribunal of Appeal	120	0	0						
				772	12	6			
„ Stationery and Books of Account				89	19	11			
„ Repairs				24	10	1			
„ Printing and Lithography				461	10	7			
„ Parliamentary Papers				32	13	10			
„ Provincial Committees and Junior Meetings				472	10	6			
„ Housekeeper's Account and Sundries				341	4	4			
„ Case of Lord Ashburton <i>v.</i> Gray—Contribution to Costs				52	10	0			
„ Law Charges				38	10	10			
							9,134	16	3
„ Purchase of £1,000 6 % Exchequer Bonds... ..							1,000	0	0
EXAMINATIONS:—									
By Examiners' Fees, Hire of Hall, &c.				532	7	0			
<i>Less</i> Candidates' Examination Fees	267	15	0						
„ Sale of Syllabus	22	0	0						
				289	15	0			
							242	12	0
„ Transfer from Penfold Scholarship Account							67	14	8
„ Petty Cash in hands of Secretary							50	0	0
„ Cash at Bankers on Current Account							659	4	1
„ Do. do. on Deposit							1,000	0	0

£12,154 7 0

LIBRARY, FORESTRY, AND

1916.	£	s.	d.	£	s.	d.
Dec. 31st. To Purchase of Books, Maps, &c. :—						
General Library	11	10	9			
Loan Library	1	5	0			
				12	15	9
„ Amount of Depreciation written off ...				296	7	6
„ Annual Subscriptions :—						
British Fire Prevention Committee ...	2	2	0			
Topographical Society	1	1	0			
London Society	1	1	0			
				4	4	0
„ Honorarium to Curator				52	10	0
„ Printing and Stationery				5	15	8
„ Insurance				7	2	6
„ Decrease in Value of Investments ...				31	2	8
„ Balance carried forward to 1917 :—						
Cash at Bankers	418	5	5			
£1,952 14s. 2d. War Loan $4\frac{1}{2}\%$ Inscribed						
Stock at 98	1,913	13	1			
£401 16s. 9d. West Australian Govern-						
ment 4% Inscribed Stock at 80 ...	321	9	5			
Value of Books, Forestry, and						
Geological Collection	3,655	5	7			
				6,308	13	6
				<u>£6,718</u>	<u>11</u>	<u>7</u>

CAPITAL ACCUMULATIONS

1916.	£	s.	d.
Dec. 31st. To Balance brought forward from Examinations			
Account (Deficit 1916)	242	12	0
„ Decrease in Value of Investments	998	5	3
„ Depreciation on Furniture	77	5	0
„ Balance carried forward to 1917	33,464	2	9

£34,782 5 0

GEOLOGICAL ACCOUNT.

1916.						£	s.	d.
Jan. 1st.	By Balance brought forward	...	...	...	...	6,545	11	7
	„ Increased Values at this date, viz.:—							
	Books purchased	...	...	...	...	12	15	9
	Books presented	...	...	...	...	9	4	0
	„ Dividends	...	...	...	...	78	11	3
	„ Donations	...	...	...	...	72	9	0

£6,718 11 7

ACCOUNT.

1916.						£	s.	d.
Jan. 1st.	By Balance brought forward	...	...	...	...	33,202	7	6
Dec. 31st.	„ Balance brought forward from Receipts and Payments (Capital)	...	...	...	...	311	17	0
	„ Balance brought forward from Receipts and Payments (Income)	...	...	...	...	1,010	2	11
	„ Increase in Outstanding Accounts	...	...	...	...	183	15	3
	„ Decrease in Liabilities	...	...	...	...	74	2	4
						£34,782	5	0

"PRIZE ENDOWMENTS"

1916,	£	s.	d.	£	s.	d.
Dec. 31st. To Decrease in Value of Investments ...				168	19	5
„ Balance carried forward, viz. :—						
"Penfold Gift"—						
£503 1s. 11d. India 3 % Stock at 57½	289	5	7			
"Beadel Bequest"—						
£278 0s. 3d. Midland Railway 2½ %						
Debenture Stock at 50 ...	139	0	1			
"Crawter Bequest"—						
£254 North British Railway No. 1						
Preference Stock at 74 ...	187	19	2			
"Watney Gift"—						
£304 14s. 1d. War Loan 4½% Inscribed						
Stock at 98 ...	298	12	2			
"Driver Bequest"—						
£440 10s. 8d. India 3½ % Stock at 66	292	19	1			
"Galsworthy Gift"—						
£500 Courage & Co. 3½% B Debenture						
Stock at 60½ ...	302	10	0			
"Mellersh Bequest"—						
£100 5 % Exchequer Bonds, 1920, at 98½	98	2	6			
Cash in hand ...	0	14	9			
				1,609	3	4
				£1,778	2	9

"PRIZE ENDOWMENTS"

1916.	£	s.	d.	£	s.	d.
Dec. 31st. To Paid for "Beadel Prize" ...	4	18	6			
„ Paid for "Driver Prize" ...	15	1	2			
„ Paid for "Crawter Prize" ...	10	5	1			
„ Paid for "Penfold Prize" ...	16	3	0			
„ Paid for "Galsworthy Prize" ...	15	0	0			
				61	7	9
„ Balance carried forward to 1917...				115	11	0

£176 18 9

CAPITAL ACCOUNT.

1916.				£	s.	d.
Jan. 1st.	By Balance brought forward (including 14s. 9d. cash balance)	...	...	1,678	2	9
	„ Purchase of £100 5 % Exchequer Bonds, Mellersh Prize	...	...	100	0	0

£1,778 2 9

INCOME ACCOUNT.

1916.				£	s.	d.	£	s.	d.
Jan. 1st.	By Balance brought forward	...	...				104	8	10
Dec. 31st.	„ Dividends as under :—								
	“ Beadel ” Bequest	...	...	5	13	10			
	“ Driver ” Bequest	...	...	12	3	0			
	“ Crawler ” Bequest	...	...	8	6	9			
	“ Mellersh ” Bequest	...	...	3	0	1			
	“ Penfold ” Gift	...	...	11	17	8			
	“ Watney ” Gift	...	...	10	5	8			
	“ Galsworthy ” Gift	...	...	13	15	7			
							65	2	7
	„ Excess of Expenditure carried to General Prize Account	...	...				7	7	4
							£176	18	9

APPENDIX TO VOL. XLIX.

Obituary.

WILLIAM BRACKETT (Fellow) was the senior member of the firm of Messrs. Brackett & Sons, 27 and 29, High Street, Tunbridge Wells, and 34, Craven Street, Charing Cross.

Born at Sudbury, in Suffolk, in 1832, Mr. BRACKETT died in June, 1916, within a few days of his old friend and fellow-townsmen, Mr. George Langridge. Strangely enough, both these gentlemen, each of whom was to carve out a prominent place for himself in the profession, started business in Tunbridge Wells in the sixties, Mr. BRACKETT purchasing the business of the late Mr. Henry Sawyer. He was elected a Fellow of The Surveyors' Institution in 1891.

Under Mr. BRACKETT the business grew rapidly, and during the last half-century the firm has been responsible for the disposal of a large number of landed estates in Kent, Surrey, and Sussex, including the Dornden and Farnham estates, which were sold to the then Marquis of Lorne, K.G., and Princess Louise, for whom Messrs. Brackett acted as agents until the estates were again sold on the Marquis of Lorne accepting appointment as Governor-General of Canada. It may be of interest to remark that Mr. BRACKETT had the unique experience on one occasion of letting houses in the same town within a few days of each other to the Duke of Wellington, successor to the victor of Waterloo, and Prince Lucien Bonaparte, nephew of the vanquished Emperor.

Mr. BRACKETT had a wide sphere of activity outside his business. He was a justice of the peace for the borough of Tunbridge Wells, the first president of the Chamber of Commerce of that town, and on the governing bodies of various hospitals and other philanthropic institutions.

PHILIP CHASEMORE (Fellow) had been a partner in the firm of Messrs. King & Chasemore, of Horsham, for upwards of thirty-five years, and was a prominent figure in the agricultural and professional life of his county. As an auctioneer, surveyor and land agent his practice covered not only Sussex, but a wide area in other southern counties. He was a regular attendant at the Auction Mart in London, and was equally well known in the show yards in the south of England, both as a successful breeder of Sussex cattle and as a member of the Council of the Royal Counties Agricultural Society, the Sussex Herd Society, and the Sussex County Agricultural Society.

Mr. CHASEMORE had been a Fellow of The Surveyors' Institution since 1891, and was an active member of the Sussex Committee of The Institution. But his interests were not confined to his profession and agriculture. For many years he represented Horsham on the West Sussex County Council, and in his younger days was a keen cricketer, a sport in connection with which he remained intimately connected as a member of the committee of the Sussex County Cricket Club.

HERBERT PHILLIPS FLETCHER, Major, D.S.O., Croix de Guerre, F.R.I.B.A., F.S.I., A.M.I.C.E. (Middlesex Hussars), attached to the Royal Flying Corps, who died on 3rd August, 1916, from injuries received while on

duty at Hounslow, was a son of the late Professor Banister Fletcher, and was born 27th February, 1872.

At the outbreak of the war he was with his regiment, the Middlesex Hussars, and went out with it to Egypt. He was then seconded, and did reconnaissance work on French aeroplanes in Asia Minor, Syria, and Arabia, being awarded the Croix de Guerre, both military and naval, for conspicuous bravery under fire.

He was afterwards put in command of a school for British observers started at Port Said, and later returned to England to take his pilot's certificate for future work with the Royal Flying Corps.

Major FLETCHER was educated at King's College, London, where he gained the gold medal in the Architectural and Engineering course.

He was a fellow of the Royal Institute of British Architects and of The Surveyors' Institution, and an associate member of the Institution of Civil Engineers, a barrister-at-law of the Middle Temple, and partner with Mr. Banister F. Fletcher, F.R.I.B.A., F.S.I., &c., in the firm of Messrs. Banister Fletcher & Sons of 29, New Bridge Street, E.C., which firm was founded by the late Professor Banister Fletcher over fifty years ago.

He was also one of the surveyors to the Board of Trade, an examiner to His Majesty's Civil Service Commission, architect and surveyor to the Worshipful Company of Carpenters, technical adviser to six of the associated City Companies, and director of their Trades Training Schools in Great Titchfield Street, W. He was also surveyor to the Justices of the Blackheath Division, and was formerly a lecturer on the staff of King's College, London.

He had travelled considerably in Europe, the United States, and Canada, and was sketching in Spain with

Mr. Seymour Lucas, R.A., when they were unfortunate enough to be in the historic railway accident at Burgos in 1891. Though Major FLETCHER had both legs broken, he and his companion were the only Englishmen who survived the disaster.

With his partner he acted as architect for many public buildings, warehouses, &c., as well as private houses in the metropolis and in the country, including King's College Schools, Wimbledon, and the alterations at King's College and Carpenters' Hall. He was a recognised authority on professional teaching, and was joint-author of *The English Home, Architectural Hygiene, Carpentry and Joinery, Arbitrations, Dilapidations, Quantities, London Building Acts, Valuations and Compensations, Light and Air*, and other textbooks.

Major PHILLIPS FLETCHER married Lydia, only daughter of the late T. T. Lindrea, Esq., J.P., of Westbury-on-Trym, Gloucestershire. His interests were very wide, and included shooting, sailing, and golf, while he had held office in connection with the North Bucks Harriers as deputy-master and as joint-huntsman.

THOMAS SMELLIE FRASER (Fellow), whose death occurred in June, 1916, was a nephew of the late Mr. Thomas Davies Smellie, Glasgow, who was elected a Member of The Institution in the year of its foundation.

Mr. FRASER received his early education in Glasgow, and continued his studies in London at the Royal School of Mines, of which he became an associate. Returning to Glasgow he entered the office of his uncle, ultimately becoming a partner with his brother in the firm of Messrs. T. D. Smellie & Fraser. He was elected a Professional Associate in 1896, and was transferred to

the Fellowship in 1897, sitting for both examinations in London, as the Scottish Examinations had not then been instituted.

Mr. FRASER's great ability, wide knowledge of affairs and sound judgment quickly established his position in the profession, and his unfailing courtesy and kindness of heart endeared him to all who came in contact with him. He was always ready to lend a helping hand to others, and it is characteristic of the man that very shortly before his death he cheerfully undertook the whole conduct of the Scottish Examinations for 1916, in the absence on military service of the Scottish Honorary Secretary.

He took a deep interest in the affairs of The Institution, and more especially of the Scottish Committee, where his wise counsel and ever-ready help will be greatly missed.

His untimely death at the age of forty-five came as a shock to his many friends—both in the profession and out of it—and leaves a blank which will never be wholly filled.

WILLIAM HARPUR (Fellow), until his death in May last, held the position of engineer and surveyor to the city and borough of Cardiff. In the course of his appointment he had occasion to carry out a large number of works in Cardiff, including the sanatorium, the corporation market, the central fire station, workmen's dwellings and other large schemes in connection with the development and improvement of the city. His shrewd judgment and great energy enabled him to render signal service to the department of which he was chief, and his death has removed one of the most prominent figures in the municipal engineering world.

At the time The Institution visited Cardiff in 1909 Mr. HARPUR took a prominent part on the committee responsible for the excellent arrangements, which contributed so greatly to the success of the visit.

Mr. HARPUR was a member of the Institution of Civil Engineers, as well as a Fellow of The Institution.

GEORGE LANGRIDGE, Past-President, whose sudden death in July, 1916, came as a painful shock to a wide circle of friends, had long occupied a leading position in his profession.

Born in 1840 of an old Kentish family, which had for several generations practised as surveyors and land agents near Maidstone, he may be said to have imbibed from his earliest years the tradition of thoroughness and sincerity, which later made him so outstanding a figure in the professional and agricultural life of the south of England. In 1869 he removed to Tunbridge Wells, and twenty years later, in partnership with Mr. Sydney Freeman, he opened an office in London. Until the demands of his growing business became too insistent, Mr. LANGRIDGE farmed a considerable area of land, and the practical experience thus attained enabled him to speak with first-hand authority on all questions connected with the management of land, and doubtless added to the confidence which his decisions inspired in the settlement of agricultural valuations.

Mr. LANGRIDGE'S connection with The Institution commenced in 1882, and from the beginning, with characteristic energy, he devoted a large amount of time to its affairs, first as chairman of the Kent Committee, and from 1894 as Member of the Council. In 1906 he was unanimously elected President, and during a very successful year of office he not only attended an almost

unprecedented number of meetings at Great George Street, but visited the Irish Branch, and many of the Provincial gatherings, thereby doing much to add to the corporate life and interest of The Institution throughout the kingdom. His courtesy, his obvious sincerity, and the wide knowledge of all matters connected with his profession which he exhibited, greatly impressed those with whom he came into contact during his year of office, and largely added to the number of those who felt his sudden death as a personal loss.

Mr. LANGRIDGE was also a generous supporter of the Benevolent Fund of The Institution, on the Committee of which he served up to the time of his death.

It would be difficult to speak too highly of his professional life. His firm have acted as advisers to a number of the largest landowners in the south-east of England, including the late Marquess of Abergavenny, the Duke of Devonshire, Viscount Falmouth, Viscount Torrington, Lord Kilhacken, and the Earl of Chichester, many of whom looked on him as a personal friend. He never, however, allowed himself to be identified as the representative of any particular interest, but by conspicuous fairness and the exercise of a marked judicial temperament, secured the confidence of landowner and tenant alike. In later years his services as arbitrator were constantly in request, and few important compensation cases in Kent or Sussex were decided in which Mr. LANGRIDGE was not called upon to take a prominent part either as arbitrator or umpire.

Before the war increasing years had caused him to take a less active part in the work of the firm into which his son, Colonel Walter Langridge, and Mr. Dudley Freeman had been taken as partners; but with the com-

mencement of hostilities the two junior partners gave up their professional work to serve their country, and Mr. LANGRIDGE, characteristically and ungrudgingly, gave up the rest he had earned by over fifty years of strenuous work and again buckled on his harness. He died, therefore; as he had lived, devoting himself to his work, and retaining to the last the confidence and affection of those whom he served. The memory of his upright, courteous, and genial personality will always live in the hearts of his many friends.

HENRY NORTHCROFT (Fellow), whose sudden death took place in October last, was trained as a quantity surveyor in his father's office, and afterwards became partner with him in the well-known firm of Messrs. Northcroft, Son & Neighbour, which, on the death of his father, became Northcroft, Neighbour & Nicholson.

He took a keen interest in The Institution, of which he became a Fellow in 1889, and was a regular attendant at its meetings, particularly when the subject under discussion touched upon matters connected with his branch of the profession. His contributions to the discussions on those occasions were marked by sound common-sense and a thorough knowledge of his subject. For a number of years Mr. NORTHCROFT had been a member of the Quantity Surveyors Committee of The Institution, and his genial presence and valuable advice will be greatly missed by his colleagues on that body.

Mr. NORTHCROFT'S practice extended to all parts of Great Britain, and comprised also a considerable connection abroad, particularly in the far East, where he was engaged on much Government work, including the Hong-Kong dockyard.

MAURICE HARRY DONNE PARSONS, Captain (Fellow), the news of whose death in action will be received with great regret, was well known to many in the west of England. He was the son of the late Mr. H. J. D. Parsons, F.S.I., of the firm of Messrs. Dymond & Parsons of Exeter, and grandson of Mr. Henry Parsons, F.S.I., who was agent for the Portman estates in Somerset and Dorset for so many years. Captain PARSONS, after his father's death, continued the practice in Exeter, but later, when the Valuation Department of the Inland Revenue was formed, he accepted appointment as district valuer for that neighbourhood.

At the time of his death, at the early age of 35, Captain PARSONS held a commission in the Royal Horse Artillery. He had in the past been a keen volunteer, and when the call of the country came to him, soon after the outbreak of the present war, he again joined the Army.

EDWARD ROBERT ROBSON (Fellow) will be remembered, by many who had occasion to meet him, as the genial and kindly architect to the London School Board, a position to which he was appointed at the time of its formation in the early seventies, and later as the consulting architect to the Education Department. He retired in 1903, after the passing of the Education Act, from the latter position. He still, however, continued the private practice which he had hitherto carried on in conjunction with his public work, and in 1910 took into partnership Mr. J. J. Gott.

Mr. ROBSON was one of the earliest Members of The Institution, having become a Fellow in 1872. He was

also a member of the Royal Institute of British Architects and of the Society of Antiquaries.

Born in 1835, the son of a prominent architect and builder, who was three times mayor of Durham, he spent some time learning the practical side of his profession in his father's workshops, and was then articled to Mr. John Dobson of Newcastle-on-Tyne.

In 1857 he came to London, and was fortunate in obtaining a position in the office of Mr. Scott, during which period he not only widely extended his architectural experience, but made many friends whose affection he retained in after life. Ten years later he commenced practice, taking Mr. J. N. Walton Wilson into partnership, and opening a branch office in Durham.

In 1864 Mr. ROBSON moved to Liverpool on his appointment as architect and surveyor to that city, where he was responsible for the erection of several public buildings, including the municipal offices.

In 1871 he returned to London, influenced partly by the desire again to undertake private practice and partly by the appointment as first architect to the London School Board which was offered him at that time. While holding this position he definitely set his mark on the architecture of London, the amount of work carried out by him in connection with his public appointment and in his private practice being very large. Later he was appointed consulting architect to the Education Department, a position which he held until the new Education Act came into operation, when, on the ground that "new measures need new men," he was somewhat cavalierly retired. No one, however, who has studied school architecture and planning can fail to recognise how greatly the nation is indebted to Mr. ROBSON for his outstanding work in this direction.

JULIAN CLARKE ROGERS, the first Secretary of The Surveyors' Institution, died at his home in Kew on the 27th May, 1917, after a short illness. Although he was in his seventy-eighth year, he had been in comparatively good health until recently, and his death came as a shock to his many friends.

It is perhaps not too much to say that The Institution, in the welfare of which he took a lively interest to the last, although he retired from the secretaryship twelve years ago, owes its present position and prosperity very largely to the untiring energy, unfailing tact, and genial personality of its first Secretary. He was appointed in 1869 when The Institution had a membership of 202, and its development from a small and select body of eminent surveyors to a powerful association representative of the whole profession is due to the foresight and judgment with which he initiated new ideas and methods and carried them through as occasion demanded them. The system of examination introduced in 1881, the establishment of Provincial Committees in 1888, and other changes which, though viewed with grave misgiving at first, have done so much to improve the status and widen the influence of The Institution, are the outcome of his zeal for the interests of the profession. The Institution owes its admirable Library and its present offices mainly to his broad views and his determination to carry them out. He served The Institution faithfully for thirty-six years, and before his retirement in 1905 succeeded in raising the membership to 3,669.

JULIAN ROGERS was the second son of George Vining Rogers, a brilliant but erratic man, to whom the son owed little except his inherited abilities. His first youth

was spent under the care of his uncle, the late James E. Thorold Rogers, at Oxford, to whom he was mainly indebted for his education. At a later date he was employed for some time on the Ordnance Survey in different parts of Great Britain. He was for a short time in the office of Mr. Edward Ryde, one of the early Presidents of The Institution, and only left on taking up the office of Secretary. His early life, therefore, was not without hardship, and although he always remembered and fully repaid in various ways the debt of gratitude he owed to his uncle, he was wholly the builder of his own fortunes.

Although devoted to the interests of The Institution, he was more than a capable secretary, and his range of interests was wide and comprehensive. He devoted a good deal of time to public affairs, and for some years served on the Acton School Board. He was a keen and appreciative musician, playing with some skill on the violin, while he found time to act as conductor to a large choral society, and for some two or three years as choirmaster in a church in West London. As a boy he was a chorister in Winchester Cathedral.

He was a great reader of all kinds of literature, except fiction, and profoundly interested in natural science, especially astronomy. In pursuance of his studies in this subject he made two large telescopes for his own use. His eyesight was exceptionally good when he was young, and he accomplished the somewhat unusual feat of engraving the whole of the Lord's Prayer in letters legible under a magnifying glass four times on a threepenny piece.

Among his friends and acquaintances he will perhaps be best remembered as a "fellow of infinite jest." He had an amazing fund of good stories and witty sayings,

which, when in the mood for it, he would pour forth to his listeners in an admirable manner, which always commanded laughter. It was impossible to remain depressed for long in his company.

Among his relations he will be remembered for his fervent and many-sided interest in their family history and welfare. He spent a great deal of time in genealogical research, and wrote in 1902 a "History of Our Family," in the preparation of which he discovered and welcomed as relatives cousins separated from him by five or six degrees. But his interest in his relatives had an even more kindly side, and his generosity led him to help those who were in need or in distress to the utmost of his power. He leaves behind him a widow but no children.

JULIAN CLARKE ROGERS was a good example of the type of English gentleman, who performs his life's task with dignity and with humour, never obtrusive or self-seeking, appreciating and enjoying whatever pleasure a cultured life has to offer, and solicitous that all who came in contact with him should do the same.

The work that he accomplished rests on a sure foundation, and will remain a permanent memorial long after the generation that knew him has passed away.

LEONARD NEVILLE ROGERS, Captain (Fellow), a partner in the firm of Messrs. Rogers, Chapman & Thomas, and an athlete of no mean attainments, is one of the increasing number of Members who have already made the great sacrifice.

He was educated at Marlborough, which he represented in cricket, football, and hockey. He was specially famous on the football field, and captained the Surrey County XV. on several occasions.

Shortly after the outbreak of the war he joined an O.T.C., and was later gazetted to the 18th Northumberland Fusiliers, with whom he met his death from shell fire in April last.

He passed the examinations of The Institution, becoming a Professional Associate in 1904, and being transferred to the Fellowship in 1909.

As a young Member whose personality and ability opened out the prospect of a brilliant professional career, his loss will be severely felt.

AUBREY RUMBALL (Fellow), the senior partner of the firm of Messrs. Rumball & Edwards, St. Albans, had been a Fellow of The Institution since 1891, and for some years held office as chairman of the Beds, Essex, Herts, and Middlesex Committee, acting at the same time on several of the Standing Committees of the Council at Great George Street.

As a young man Mr. RUMBALL entered his father's office, continuing and greatly enlarging the business after the latter's death in 1879. More than twenty years ago he took Mr. G. H. Edwards into partnership, and at the time of his death the firm was responsible for the management of estates in Lincolnshire, Cambridgeshire, Warwick, Essex, Cornwall, Hants, and Northants. Mr. RUMBALL continued to take an active interest in his professional work in spite of advancing years, and had attended to work at the office on the morning of the day he died. He had then attained the age of eighty.

Mr. RUMBALL was for many years an active volunteer, joining the County Force originally in 1857 as a private, and retiring as lieutenant-colonel, having worked his way successively through all ranks. He was a first-

class shot, winning on one occasion the Prince of Wales' Cup, and being included on another occasion in the English "Eight." At the time of his death he was second in command of the Hertfordshire Volunteers, and received the honour of a military funeral.

WILLIAM TANNER (Fellow) was a native of Newport (Mon.), and was articled to Mr. A. O. Watkins. He afterwards took up an appointment in Leicester, but returned to Newport in 1874 on being appointed assistant surveyor to the corporation. In 1883 he was appointed county surveyor by the Monmouthshire Quarter Sessions, which post he held till the time of his death, which occurred suddenly at the county offices last December. He became a Professional Associate of The Institution in 1884 and a Fellow in 1888.

RICHARD FREDERICK TAYLOR, a Fellow of The Institution for the last twenty-seven years, died at his residence in March last. Mr. TAYLOR was for over thirty years a partner in the firm of Messrs. Jones, Lang & Co., of 3, King Street, Cheapside, E.C. He was principally engaged in dealing with City property, and acted for the Corporation of the City of London. He was educated at the City of London School, and after serving his articles with a firm of auctioneers at Weston-super-Mare he entered Messrs. Jones, Lang & Co.'s office, and ten years later became a partner in the firm. He had been a Fellow of The Institution since 1890, and was a member of the Council of the Auctioneers' and Estate Agents' Institute.

FREDERICK A. B. TURNER (Fellow), whose tragic death after an operation, within a few days of his election to the Council, came as a great shock to his many friends, had been a member of the Council

of the Irish Land Agents' Association from its inception, and was one of those largely responsible for the amalgamation of that body with The Institution in 1895. He was elected chairman of the Irish Branch, 1905-6, and no more representative surveyor could have been selected to follow Mr. Geo. F. Stewart on the Council of The Institution on the latter passing the Chair in June, 1917.

Mr. FREDERICK TURNER was the second son of Mr. John Turner of Quellwyn, Carnarvonshire. He was educated privately, and entered upon professional work in the office of his uncle, Mr. James S. Scott. On Mr. Scott's retirement in 1882, Mr. TURNER succeeded to his business, and in partnership with the Hon. George Stopford, F.S.I., the work of the firm increased so largely that it became necessary to work it from seven different centres in Ireland. Later the firm was joined by Mr. E. F. Leslie Ellis, F.S.I., Mr. TURNER's brother-in-law.

Apart from Mr. TURNER's great business ability, he possessed a peculiarly attractive personality. His generosity was proverbial, but was given with the air rather of receiving a favour than of conferring one; a fund of anecdote, a quick understanding, a ready sympathy, all combined to make him one of the most popular figures in his profession.

WILLIAM COOKE YARBOROUGH (Chief Clerk), whose death occurred in November last, had been for upwards of twenty-five years on the office staff of The Institution, and had for the last twelve years held the important post of Chief Clerk. It would be difficult to find anyone possessing more fully the qualifications required to fill successfully that exacting position, which brings its holder into daily touch with large numbers of Members.

Mr. YARBOROUGH'S unfailing courtesy and readiness

to help, his obvious devotion to the interests of The Institution and its Members, his knowledge of the minutiae connected with The Institution affairs, and his kindly relations with the other members of the staff, fitted him in an exceptional degree for the duties he was called upon to perform, and would in any event have caused his loss to be felt with special severity. But beyond this he brought into his work a human sympathy with and understanding of the difficulties of others, which resulted in his advice being sought and valued by a large circle, particularly of the younger Members, and added to the real affection which he inspired in all who knew him.

Mr. YARBOROUGH'S interests were not confined to The Institution. As a young man he had been a fine cricketer and football player. He was also well known as an amateur actor, and was, up to the last, a keen fisherman. But it was in Church affairs that his interests and sympathies outside The Institution were most closely wrapped up. For forty-eight years he had sung in the choir of the Church of St. John the Baptist, Holland Road, W., and during that time, besides undertaking Sunday school work, he had at various times held office as server and sacristan. For the last two years of his life he had undertaken a large amount of additional work in connection with the Diocesan Church Lads' Brigade, taking up duties which his two sons had been obliged to relinquish on joining His Majesty's Forces. It was largely to his unselfish devotion to this additional work that his fatal illness must be attributed, and there is little doubt that his valuable life might have been spared for many years had he not so earnestly desired to carry on work that younger men had had to leave at their country's call.

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Brown, Reginald	{ Brown, Reginald, "Hydraulics—and Hydraulics II."
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British Standards Committee	{ "Nomenclature of Tars, &c." "Nomenclature of Electrical Pressures." "Nomenclature of Wrot. Steels for Automobiles."
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Cantell, M. T.	{ Cantell, M. T., "Report on the Trunk Sewer of the Rural Municipality of St. Vital, Manitoba, Canada."
Central Association of Agricultural and Tenant-Right Valuers	{ Allen, W. (Lecture by), "Law and Practice of Agricultural Arbitrations." "Sixth Annual Report," 1915-1916.
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Crown Agents for the Colonies	McCaw, T. G., "Trigonometrical Survey of Fiji; and Report on the Survey of Viti Levu."
Farmers' Club	"Journal," 1916-1917.
Garnett, J. C. M.	Garnett, J. C. M., "Part-time Secondary Education."
Highland and Agricultural Society of Scotland	"Transactions," 1916.
Hunters, Ltd., Messrs. ...	Porter, John, "A Big Stride in Agricultural Improvement."
Institute of Arbitrators ...	"Journal," Vol. 1, No. 3.
Institute of Chartered Accountants	List of Members, 1916.
Institution of Civil Engineers	"Minutes of Proceedings," Vol. 201.
Institution of Civil Engineers of Ireland ...	"Transactions," Vol. 42, 1916.
Institution of Electrical Engineers	"Journal," Vols. 54 and 55, 1916-1917.
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Lewis, Lt.-Col. G. A., C.M.G., Lewis, P. W., Payton, E., (partners in the firm of Lewis & Lewis)	Institute of Mining Engineers:—"Transactions," complete set, bound, Vols. 1 to 50.
Liverpool Architectural Society	"Annual Report," 1916.
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McCall, B. J. S. J....	Nyassaland Protectorate:—"Report of the Department of Agriculture, 1916."

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Mirams, A. E.	{ Mirams, A. E., "Housing and Bombay."
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	{ Mirams, A. E., "Some Town Planning Problems."
Moore, Harold E.	{ Moore, Harold E., "Farm Work for Discharged Soldiers."
North of England Institute of Mining and Mechanical Engineers	{ "Transactions," 1916-1917.
	{ List of Members, with Annual Report.
O'Donahue, T. A.	{ O'Donahue, T. A., "The Valuation of Mineral Property."
Pratt, E. A.... ..	{ Pratt, E. A., "A London Transport Trust : Criticism of an Impracticable Scheme."
Royal Agricultural Society of England	{ "Journal," Vol. 76.
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Society of Incorporated Accountants and Auditors	{ "Year-Book," with List of Members.
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Young, W. R. ...	Young, W. R., "War, and the Economic Aspect of the Housing Problem."

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